
MOJAVE DESERT
AIR QUALITY MANAGEMENT DISTRICT

Preliminary Determination/Decision - Statement of Basis
for
Modification to

FOP Number: 100005

For:

CEMEX Construction Materials Pacific, LLC

Facility:

**CEMEX River Plant and Mountain Quarry
Plant**

Document Date: **07-16-19**

Submittal date to EPA/CARB for review on or before: **07-17-19**

EPA/CARB 45-Day Commenting Period ends: **09-02-19**

Public Notice Posted, on or before: **07-22-19**

30-Day Public Commenting Period ends at COB: **08-21-19**

Permit Issue date: On or about: **09-03-19**

Permitting Engineer:
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A. Introduction

1. Application and Setting

CEMEX Construction Materials Pacific, LLC (CEMEX) owns and operates the River and Black Mountain Quarry plants in Victorville and Apple Valley, CA. Their product involves the mining and processing of limestone to produce Portland Cement.

CEMEX has submitted an Authority to Construct Permit Application for the CEMEX - Black Mountain Quarry Plant (Apple Valley) facility and the River Plant (Victorville) both located in San Bernardino County, California to authorize the operation of two diesel-fired portable compressor engines and one stationary emergency fire pump, which will be located at their Quarry Plant. The trailer mounted diesel-fired portable compressors will be moved among each facility depending on its needs at either location. The two plants share a common Title V permit as their rail system makes them a contiguous facility.

Concurrent with the application process, Cemex has requested a Significant Modification to incorporate the new equipment and regulatory requirements into their existing Title V permit.

Since CEMEX is an existing Major source of air contaminants for SO_x, NO_x, VOC, and PM-10, all new sources of emissions, for these pollutants must be fully offset.

Therefore, and pursuant to Regulation XIII, emission reduction credits (ERCs) were purchased from Sierra Power Corporation and transferred to CEMEX to offset the applicable annual pollutant emissions produced by the additional engines. The ERCs were transferred from San Joaquin Valley Air Pollution Control District (SJVAPCD) to the MDAQMD. A copy of the ERC transfer package is included in the Application copy located in Appendix A.

The following ERC amounts were transferred to CEMEX from Sierra Power Corporation:

- 23 pounds PM-10;
- 878 pounds NO_x, and
- 4 pounds SO_x.

The applicant is proposing a 1.3 to 1 emission offset for the ERCs transferred from the SJVAPCD to the Mojave Desert AQMD and an additional 2:1 NO_x for VOC, as the purchased ERCs did not directly include VOC credits.

Pursuant to District Rule 1301 – *New Source Review Definitions*, CEMEX is an existing Major Facility for CO, NO_x, VOC and PM10. This section of the MDAQMD is classified as attainment by USEPA and CARB for CO and SO₂, and Non-Attainment for Ozone and PM-10. Therefore, pursuant to District Rule 1303 – *New Source Review Requirements*, the proposed equipment is subject to both BACT and Offset requirements for the Nonattainment Air Pollutant and Precursors of NO_x, VOC and PM10.

Also, and since the application involves three new emission units located at an existing Major Source Facility, a complete NSR Analysis is required.

CEMEX, is defined as a federal Major Facility pursuant to District Rule 1201 – *Federal Operating Permit Definitions*. The proposed modifications are classified as a Significant Modification to the CEMEX Federal Operating Permit (FOP). Pursuant to District Rule 1205 – *Modifications of Federal Operating Permits*, section (B)(2) and District Rule 1302(D)(1)(d), this document serves as the preliminary decision and Statement of Legal and Factual Basis.

2. Description of Project

CEMEX proposes to permit and operate a new Tier III DIESEL IC ENGINE, EMERGENCY WATER PUMP, consisting of One John Deere, Diesel fired internal combustion engine Model No. 6090HFC47A and Serial No. RG6080L117349, After Cooled, Electronic Control Module, High Pressure Fuel Injection (also EM), Turbo Charged, producing 422 bhp with 6 cylinders at 1760 rpm while consuming a maximum of 17 gal/hr, which powers a Firewater Pump. Additionally, CEMEX is seeking to permit and operate two new DIESEL IC ENGINE, PORTABLE AIR COMPRESSORS, each consisting certified Tier 4-Final 4SRB, diesel-fueled engines.

The emissions associated with these three new engines will be completely offset through the use of purchased Emission Reduction credits from the upwind San Joaquin Valley Air Pollution Control District.

B. Analysis

1. Determination of Emissions [District Rule 1302(C)(1)]

The owner/operator has proposed to operate the new Fire Pump engine as an emergency engine and to operate the engine no more than 50 hours per year for testing and maintenance purposes. Therefore, and pursuant to District Rule 1302, Procedure, the engines Potential to Emit (PTE) has been calculated based on 1-Hr/Day, and no more than 50 hours per year for testing and maintenance. CO, NO_x, VOC and PM-10 emission levels are based on manufacturer's guaranteed levels, and SO_x is calculated based on fuel flow rate and sulfur content of 15 ppmv. See Table 1 below for emissions summary.

Table 1: CEMEX – Black Mountain Quarry Plant (Apple Valley) Emissions from Emergency Firepump

<https://www.deere.com/cal/generator-drive-engines/cv-steps-iii-a/powertech-a-9-0l-hfg84/>

<i>Application Not Permitted</i>	MD1000002306	Units	1000 GAL/HR	1000 GAL/YR
<i>Permit No.</i>	E013353			
<i>Equipment Certified Tier</i>	John Deere			
<i>Make</i>				
<i>Model</i>	6090HFC47A			
<i>EPA Family</i>	DJDXL09.0114			
<i>CARBED</i>	NA			
<i>Fuel rate</i>	17.00 gal/hr		0.017	0.85
<i>Engine kW</i>	315 kW			
<i>Engine bhp</i>	422 bhp			
<i>Daily Operation</i>	1 hr/day			
<i>Annual Operation</i>	50 hrs/yr			

POLLUTANT	CAS #	Emission Factor	Lbs/1000-Gals	PTE (lbs/Hr)	PTE Daily Emissions (lbs/day)	PTE Annual Emissions (lbs/year)	PTE Emissions (tons/yr)	Emission Factor g/bhp-hr (1kW= 1.341)
CRITERIA								
CO	42101	0.9000 g/Kw-hr	36.7653	0.6250	0.62501	31	0.0156	0.7
SO ₂	42401	0.0050 g/Kw-hr	0.2026	0.0034	0.00344	0.172	0.0001	0.004
NOX	42603	3.5000 g/Kw-hr	142.9763	2.4306	2.43060	122	0.0608	2.6
NMHC (VOC)	43104	0.1000 g/Kw-hr	4.0850	0.0694	0.06945	3	0.0017	0.1
NOX + NMHC (VOC)		3.7000 g/Kw-hr	151.1463	2.5695	2.56949	128	0.0642	2.7
PM ₁₀	85101	0.1400 g/Kw-hr	5.7191	0.0972	0.09722	5	0.0024	0.11
PM _{2.5}	88101	0.1400 g/Kw-hr	5.7191	0.0972	0.09722	5	0.0024	0.11

TOXICS								
Diesel Particulate	9901		5.7191	9.72E-02	9.72E-02	4.86E+00		

NOTES:

Emission Factors are from Manufacturers Spec Sheet except SO_x, which is calculated below.

*Data used to calculate SO _x Emission Factors			
<i>Fuel rate</i>	17 gal/hr		
<i>Density of Ultra-low Sulfur Diesel No. 2</i>	6.76 lbs/gal		
<i>Sulfur fraction of Ultra-low Sulfur Diesel No. 2</i>	0.000015 gS	0.0015%	Rule M 431 Requires 0.05 % Max
<i>Molecular Weights</i>			
Sulfur	32.06 g/mol		
Sulfur dioxide	64.06 g/mol		
	1.998128509 gSO ₂ /gS		
<i>Horsepower of Engine</i>	422		
	315 Kw		
	0.003174603 1/Kw		
<i>Conversions</i>			
	453.6 g/lbs		
<i>Equation used</i>			
17 gal/hr X 6.76 lbs/gal X 453.515 g/lb X 0.0015gS/100g (sulfur) X 1/315kW X 64.06 gSO ₂ /32.06gS =			
SO _x Emissions =	0.0050 gSO ₂ /Kw-hr		

Emissions from the two Portable Air Compressors are based on Tier IV Final emission standards for certified off-road engines. See Tables 2 and 3 below for emissions summary from each of the two portable air compressor emissions.

Table 2: CEMEX – Black Mountain Quarry and River Plant Portable Air Compressor

Application No/Permit No		Units	1000 GAL/HR	1000 GAL/YR					
Permit No.	B013522								
Equipment Tier IV Final									
Make	John Deere								
Model	6068								
EPA Family									
CARB ECU									
Fuel rate	10.10	gal/hr	0.0101	88.476					
Engine Kw	186.43								
Engine bhp	250								
Daily Operation	24	hr/day							
Annual Operation	480	hrs/yr							

POLLUTANT	CAS #	Emission Factor	Lbs/1000-Gals	PTE (lbs/Hr)	PTE Daily Emissions (lbs/day)	PTE Annual Emissions (lbs/year)	PTE Emissions (tons/year)	Emission Factor g/bhp-hr (1Kw = 1.341 bhp)	
CRITERIA									
CO	42101	3.50 g/kw-hr	7.8041	0.0788	34.5237	690	0.3452	2.610	
SO _x	42401	0.0050 g/kw-hr	0.0111	0.0001	0.0491	1	0.0005	0.004	
NO _x	42603	0.40 g/kw-hr	0.8919	0.0090	3.9456	79	0.0395	0.298	
NMHC (VOC)	43104	0.1900 g/kw-hr	0.4237	0.0043	1.8741	37	0.0187	0.142	
PM ₁₀	85101	0.0200 g/kw-hr	0.0446	0.0005	0.1973	4	0.0020	0.015	
PM2.5	88101	0.0200 g/kw-hr	0.0446	0.0005	0.1973	4	0.0020	0.015	
TOXICS									
Diesel Particulate	9901		0.0446	4.50E-04	1.08E-02	3.95E+00			

NOTES:
Emission Factors are from Off-Road Engine Standards for Tier IV Final

*Data used to calculate SO _x Emission Factors			
Fuel rate	10.1 gal/hr		
Density of Ultra-low Sulfur Diesel No. 2	6.76 lbs/gal		
Sulfur fraction of Ultra-low Sulfur Diesel No. 2	0.000015 gS	0.0015%	Rule M 431 Requires 0.05 % Max
Molecular Weights			
Sulfur	32.06 g/mol		
Sulfur dioxide	64.06 g/mol		
	1.938128509 gSO ₂ /gS		
Horsepower of Engine			
	186.4280388 Kw		
	0.005364 1/Kw		
Conversions			
	453.6 g/lbs		
Equation used			
10.1 gal/hr X 6.76 lbs/gal X 453.515 g/lb X 0.0015gS/100g (sulfur) X 1/186.43kW X 64.06 gSO ₂ /32.06gS =			
SO _x Emissions =	0.0050 gSO ₂ /Kw-hr		

Table 3: CEMEX - Black Mountain Quarry and River Plant Portable Air Compressor

<i>Application No/Permit No</i>		Units	1000 GAL/HR	1000 GAL/YR					
<i>Permit No.</i>	B013523								
<i>Equipment Tier IV Final</i>									
<i>Make</i>	John Deere								
<i>Model</i>	6068								
<i>EPA Family</i>									
<i>CARBED</i>									
<i>Fuel rate</i>	10.10	gal/hr	0.0101	88.476					
<i>Engine Kw</i>	186.43								
<i>Engine bhp</i>	250								
<i>Daily Operation</i>	24	hr/day							
<i>Annual Operation</i>	480	hr/yr							

POLLUTANT	CAS #	Emission Factor	Lbs/1000-Gals	PTE (lbs/Hr)	PTE Daily Emissions (lbs/day)	PTE Annual Emissions (lbs/year)	PTE Emissions (tons/year)	Emission Factor g/bhp-hr (1Kw= 1.341 bhp)
CRITERIA								
CO	42101	3.50 g/kw-hr	7.8041	0.0788	34.5237	690	0.3452	2.610
SO _x	42401	0.0050 g/kw-hr	0.0111	0.0001	0.0491	1	0.0005	0.004
NO _x	42603	0.40 g/kw-hr	0.8919	0.0090	3.9456	79	0.0395	0.298
NMHC (VOC)	43104	0.1900 g/kw-hr	0.4237	0.0043	1.8741	37	0.0187	0.142
PM ₁₀	85101	0.0200 g/kw-hr	0.0446	0.0005	0.1973	4	0.0020	0.015
PM2.5	88101	0.0200 g/kw-hr	0.0446	0.0005	0.1973	4	0.0020	0.015
TOXICS								
Diesel Particulate	3901		0.0446	4.50E-04	1.08E-02	3.95E+00		
NOTES:								
Emission Factors are from Off-Road Engine Standards for Tier IV Final								
*Data used to calculate SO _x Emission Factors								
<i>Fuel rate</i>	10.1	gal/hr						
<i>Density of Ultra-low Sulfur Diesel No. 2</i>	6.76	lbs/gal						
<i>Sulfur fraction of Ultra-low Sulfur Diesel No. 2</i>	0.000015	gS	0.0015%	Rule M 431 Requires 0.05 % Max				
<i>Molecular Weights</i>								
Sulfur	32.06	g/mol						
Sulfur dioxide	64.06	g/mol						
	1.998128509	gSO ₂ /gS						
<i>Horsepower of Engine</i>	186.4280388	Kw						
	0.005364	1/Kw						
<i>Conversions</i>								
	453.6	g/lbs						
<i>Equation used</i>	10.1 gal/hr X 6.76 lbs/gal X 453.515 g/lb X 0.0015gS/100g (sulfur) X 1/186.43kw X 64.06 gSO ₂ /32.06gS =							
SO _x Emissions =	0.0050	gSO ₂ /Kw-hr						

Since the proposed engines are new emission sources, all of the criteria pollutants for those pollutants, for which the facility is a major source of, and that the District is designated as nonattainment for, shall be fully offset. CEMEX is an existing Major Source for NO_x, CO, VOC, SO_x and PM₁₀, with a Potential to Emit that exceeds the major source thresholds for these air pollutants. The MDAQMD is in attainment for CO, and therefore this attainment air pollutant will not require offset. The MDAQMD is also in attainment for SO_x, however, it is a precursor of PM₁₀ and the applicant is proposing to offset those emissions along with NO_x, VOC and PM₁₀. Table 4 summarizes the emissions for SO_x, NO_x, VOC's and PM-10 from the new engines.

Table 4: Emission Summary for Three New Engines				
Permit Number	SOX Lbs/Yr	NOx Lbs/Yr	VOC Lbs/Yr	PM10 Lbs/Yr
E013353	0.17	121.53	3.4723	4.86119
B013522	0.98	78.91	37.4829	3.94557
B013523	0.98	78.91	37.4829	3.94557
Total Lbs/Yr	2.14	279.35	78.44	12.75

As mentioned, the applicant has purchased and transferred Emission Reduction Credits (ERCs) from the SJVAPCD. A copy of the ERC transfer package is included in the Application package, copy of which is in Appendix A of this document.

In anticipation of the need for ERCs Cemex Construction Materials Pacific, LLC requested and received approval of the transfer of ERCs from SJVAPCD. This was accomplished in accord with the California Health and Safety Code Section 40709.6, which requires an inter-district transfer to be approved by a resolution adopted by the Governing Board or Air Pollution Control Officer in each District.

From application:

California Health and Safety Code 40709.6 allows for the offset of emissions at a stationary source located in one air district with emissions reductions credited to a stationary source in another air district, outside of the air basin if the following conditions are met; the stationary source to which the emissions reductions are credited is located in an upwind district that is classified as being a worse non-attainment status than the downwind district, and the stationary source at which there are emissions increase to be offset is located in a downwind district that is overwhelmingly impacted by emissions transported from the upwind district.

The MDAQMD concurs that the ERC transfer meets the requirements of the California Health and Safety Code. Furthermore, to ensure that a greater amount of ERCs than pollutants emitted, and pursuant to MDAQMD regulations, CEMEX has proposed that the purchased ERCs are greater than the potential to emit from the three engines by a ratio of 1.3 to 1. Additionally, the applicant has proposed the use of NOx ERCs for VOCs at additional inter-pollutant ratio of 2:1.

Detailed documentation of the ERCs and transfer sequence can be found in the application in the Appendix section of this document. Table 5, below, summarizes the available ERC's.

Table 5: ERC's Transferred to CEMEX				
ERC Certificate	SOx Lbs/Yr	NOx Lbs/Yr	VOC Lbs/Yr	PM10 Lbs/Yr
SJVAPCD PM10 ERCs from Certificate No. 5-4847-4	0	0	0	23.00
SJVAPCD SOx ERCs from Certificate No. 5-4585-5	4.00	0	0	0
878 pounds of SJVAPCD NOx ERCs, or 0.439 tons of MDAQMD NOx ERCs from Certificate No. 5-4990-2	0	878.00	0	0

As previously stated, CEMEX is proposing a 1.3 to 1 for the Inter-District ERC transfer ratio for the applicable pollutants; and, a 2:1 NOx for VOC interpollutant ratio. Table 6 summarizes the results of the ERCs required, including the applicable ratios.

Table 6: ERC Summary Including Applicable Ratios				
Permit Number	SOx Lbs/Yr	NOx Lbs/Yr	VOC Lbs/Yr	PM10 Lbs/Yr
E013353	0.17	121.53	3.4723	4.86119
B013522	0.98	78.91	37.4829	3.94557
B013523	0.98	78.91	37.4829	3.94557
Total Lbs/Yr	2.14	279.35	78.44	12.75
ERCs Required (Apply 1.3 to 1 Ratio for Criteria Pollutants)	2.78	363.16	101.97	16.58
NOx for VOC at 2:1 Ratio		203.94	203.94	
Total Required ERCs After Ratio Adjustments	2.78	567.10		16.58
Total ERCs Available	4	878	0	23
Total Required ERCs After Ratio Adjustments (from above)	2.78	567.10	0.00	16.58
Excess ERCs	1.22	310.90	0.00	6.42

In conclusion, the purchased ERCs are more than adequate to account for the emission from the proposed three new engines.

2. Determination of Nonattainment NSR Requirements

[District Rule 1302(C)(2)]

a. BACT Evaluation

[District Rule 1302(C)(2)(a)]

Best Available Control Technology (BACT) is required for each new or Modified Permit Unit at a Modified Facility that emits, or has the Potential to Emit, twenty-five (25) pounds per day or more of any Nonattainment Air Pollutant or its Precursors (District Rule 1303(A)). Additionally, BACT is required for a new or Modified Facility that emits, or has the Potential to Emit, twenty-five (25) tons per year or more of any Nonattainment Air Pollutant or its Precursors (District Rule 1303(A)).

CEMEX, has a facility PTE in excess of twenty-five (25) tons per year for the Nonattainment Air Pollutants and Precursors of NO_x, VOCs, SO_x, and greater than 15 tpy for PM₁₀.

Since the facility is a major source for NO_x, VOC, SO_x and PM₁₀, applicable BACT must be applied to all new equipment.

Proposed new equipment consists of:

1-DIESEL IC ENGINE, EMERGENCY WATER PUMP consisting of: Year of Manufacture is 2013. Engine is a certified Tier III diesel engine, EPA Family DJDXL09.0114; EPA Certificate Number DJDXL09.0114-005; Engine Model Year 2013; DOES NOT HAVE A CORRESPONDING CARB EO CERTIFICATE. Engine meets USA EPA (NSPS) Tier 3 Emissions Certified Off-Road (40 CFR Part 89) and NSPS Stationary (40 CFR Part 60 Sub Part IIII). Engine Exhaust Flow is TBD cfm at TBD Degrees F.

This engine is classified as an emergency water pump engine. BACT emission levels have been established for this class and category; obtained by the San Joaquin Valley Unified Air Pollution District for an Emergency Diesel fueled firewater pump engine; see screen print from their BACT determination, specifically as applicable to this Engine type.

See website: <https://www.valleyair.org/busind/pto/bact/chapter3.pdf>

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 3.1.4*

Last Update: 06/30/2001

Emergency Diesel I.C. Engine Driving a Fire Pump

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Positive crankcase ventilation [unless it voids the Underwriters Laboratories (UL) certification]	Catalytic Oxidation	
SOx	Low-sulfur diesel fuel (500 ppmw sulfur or less) or Very Low-sulfur diesel fuel (15 ppmw sulfur or less), where available.		
PM10	0.1 grams/bhp-hr (if TBACT is triggered) (corrected 7/16/01) 0.4 grams/bhp-hr (if TBACT is not triggered)		
NOx	Certified NOx emissions of 6.9 g/bhp-hr or less		
CO		Oxidation Catalyst	

1. Any engine model included in the ARB or EPA diesel engine certification lists and identified as having a PM10 emission rate of 0.149 grams/bhp-hr or less, based on ISO 8178 test procedure, shall be deemed to meet the 0.1 grams/bhp-hr requirement.

2. A site-specific Health Risk Analysis is used to determine if TBACT is triggered. (Clarification added 05/07/01)

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a State Implementation Plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

***This is a Summary Page for this Class of Source**

The certified, Tier III, engine emissions, from the Engine Manufacturer, John Deere, are provided herein:

Rating Specific Emissions Data - John Deere Power Systems



Nameplate Rating Information

Clarke Model	JW6H-UFADJO
Power Rating (BHP / kW)	350 / 261
Certified Speed (RPM)	1760

Rating Data

Rating	6090HFC47A	
Certified Power (kW)	315	
Rated Speed	1760	
Vehicle Model Number	Clarke Fire Pump	
Units	g/kW-hr	g/hp-hr
NOx	3.5	2.6
HC	0.1	0.1
NOx + HC	3.7	2.7
Pm	0.14	0.11
CO	0.9	0.7

Certificate Data

Engine Model Year	2013
EPA Family Name	DJDXL09.0114
EPA JD Name	450HAB
EPA Certificate Number	DJDXL09.0114-005
CARB Executive Order	Not Applicable
Parent of Family	6090HFG84A
Units	g/kW-hr
NOx	3.8
HC	0.1
NOx + HC	3.9
Pm	0.13
CO	0.9

* The emission data listed is measured from a laboratory test engine according to the test procedures of 40 CFR 89 or 40 CFR 1030, as applicable. The test engine is intended to represent nominal production hardware, and we do not guarantee that every production engine will have identical test results. The family parent data represents multiple ratings and this data may have been collected at a different engine speed and load. Emission results may vary due to engine manufacturing tolerances, engine operating conditions, fuels used, or other conditions beyond our control.

This information is property of Deere & Company. It is provided solely for the purpose of obtaining certification or permits of Deere powered equipment. Unauthorized distribution of this information is prohibited.

The MDAQMD has compared the certified emissions with the BACT requirements and it has been determined that the emergency fire-pump engine meets BACT requirements for this class and category of engine.

This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. Additionally, the proposed emergency diesel IC engine powering a firewater pump is exempt from the operating hours limitation provided the engine only operates the amount of hours necessary to satisfy National Fire Protection Association (NFPA) regulations.

The applicant is also proposing to permit two new DIESEL IC ENGINE, PORTABLE AIR COMPRESSORS, each consisting of: A certified Tier 4 Final, 4-Stroke Rich Burn (4SRB), diesel-fueled engine manufactured in 2016. Engine Exhaust Flow is TBD cfm at TBD Degrees F. Stack height is TBD feet high and Stack Diameter is TBD inches. Equipment elevation is 3620 feet above sea level. Each consists of one John Deere, Diesel fired internal combustion engine Model No. 6068 and Serial No's HOP081888, and TBD, After Cooled, Diesel Oxidation Catalyst, Diesel Particulate Filter, Selective Catalytic Reduction, producing 250 bhp with 6 cylinders at 2100 rpm while consuming a maximum of 10.1 gal/hr.

These engines, classified as Transportable, Compression - Ignited IC Engines (Non-Agricultural). BACT emission levels have been established for this class and category obtained by the San Joaquin Valley Unified Air Pollution District. A screen-print of that BACT determination is shown below.

Also see website: <https://www.valleyair.org/busind/pto/bact/chapter3.pdf>.

Best Available Control Technology (BACT) Guideline 3.2.11*

Last Update: 08/11/2014

Transportable Compression - Ignited IC Engines (Non-Agricultural)*

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	<p>The proposed engine shall meet the latest available CARB certification standard for the particular horsepower range.</p> <p>(Example: a 200 bhp engine proposed in 2014 shall be Tier 4i certified and meet the emission standard of 0.14 g-VOC/bhp-hr)</p>		LPG/Propane Fired Engine
SOx	Very Low Sulfur Fuel (0.0015% fuel S by weight)		
PM10	<p>The proposed engine shall meet the latest available CARB certification standard for the particular horsepower range.</p> <p>(Example: a 200 bhp engine proposed in 2014 shall be Tier 4i certified and meet the emission standard of 0.01 g-PM10/bhp-hr)</p>		LPG/Propane Fired Engine
NOx	<p>The proposed engine shall meet the latest available CARB certification standard for the particular horsepower range.</p> <p>(Example: a 200 bhp engine proposed in 2014 shall be Tier 4i certified and meet the emission standard of 1.5 g-NOx/bhp-hr)</p>		LPG/Propane Fired Engine
CO	<p>The proposed engine shall meet the latest available CARB certification standard for the particular horsepower range.</p> <p>(Example: a 200 bhp engine proposed in 2014 shall be Tier 4i certified and meet the emission standard of 2.6 g-CO/bhp-hr)</p>		LPG/Propane Fired Engine

*For the purposes of this BACT guideline, Transportable Compression -Ignited IC engines are IC engines that remain or will remain at a location (any single site at a building, structure, facility, or installation) for 12 months or less or a shorter period of time for an engine located at a seasonal source.

3.2.11

San Joaquin Valley Unified Air Pollution Control District

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a State Implementation Plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

***This is a Summary Page for this Class of Source**

The manufactures spec sheet indicates that these portable air compressor engines are Tier 4 Final engines. See screen print from spec sheet below:

Technical data

Model		XAVS 650 JD8		XAS 900 JD8	
Actual free air delivery (Standard air)	CFM*	575	650	750	867
Actual free air delivery (Aftercooled air)**	CFM*	545	620	720	837
Working pressure	psi (Bar)	250	200	150	100
Working pressure range	psi (Bar)	58 - 275		58 - 175	
Discharge outlet quantity	#	3 standard, 4 w/ aftercooler			
Discharge outlet size	inches	1 x 1 1/2" & 2 x 3/4"			
Regulation system		Pneumatic			

Engine					
Model	John Deere	6068			
Displacement	L	6.8			
Cylinders	#	6			
Tier	US EPA	Tier 4 Final			
Exhaust after-treatment		DOC / DPF / SCR			
HP		250			
Rated speed (High)	RPM	2100			
Rated speed (Low)	RPM	1300			
Fuel tank capacity	Gal (L)	88 (333)			
Fuel consumption @ 100% load	Gal/hr (L/hr)	10.1(38.2)	10.5(39.7)	10.7(40.5)	10.7(40.5)
Fuel autonomy @ 100% load	Hours	8.7	8.4	8.2	8.2
DEF tank capacity	Gal (L)	11.3 (43)			
DEF autonomy @ 100% load***	Hours	>24			

Unit dimensions - LxWxH					
Single axle trailer	Inches	203 x 80 x 86			
Weight (Wet)	lbs (kg)	7,980 (3,620)			
Support mounted	Inches	145.5 x 66.5 x 78			
Weight (Wet)	lbs (kg)	TBA			

* Measured according to ISO 1217, 2009 annex D. Dependent on ambient conditions and temperature

** Aftercooler is an optional feature

*** Based on estimate of 3.5% of fuel consumption. Actual amount will vary based on environmental conditions, DEF age and quality

Photos and illustrations contained herein might depict products with optional and/or extra components which are not included with the standard version of this product and, therefore, are not included in a purchase of such product unless the customer specifically purchases such optional/extra components. We reserve the right to change the specifications and design of products described in this literature without notice. Not all products are available in all markets.

Since the proposed engines are EPA certified Tier IV Final engines, they meet the BACT requirements from the SJVAPD BACT determination described above.

b. Offsets Evaluation

[District Rule 1302(C)(3)]

Offsets are required for any new or modified Facility which has the Potential to Emit a Regulated Air Pollutant in an amount greater than or equal to the thresholds for the Nonattainment Air Pollutants and their Precursors specified in District Rule 1303 (B)(1). The offset threshold is 100 tons per year for CO, 15 tons per year for PM10, 25 tons per year for NOX, 25 tons per year for SOx, and 25 tons per year for ROC (VOC). It is proposed to utilize ERCs that were purchased in the SJVAPD and transferred to the MDAQMD for the purpose of offsetting the emissions from the proposed three new emission sources.

Table 5 below summarizes the ERCs that have been transferred to CEMEX Construction Materials Pacific, LLC, located within the MDAQMD nonattainment area.

Table 5: ERC's Transferred to CEMEX				
ERC Certificate	SOX Lbs/Yr	NOx Lbs/Yr	VOC Lbs/Yr	PM10 Lbs/Yr
SJVAPCD PM10 ERCs from Certificate No. 5-4847-4	0	0	0	23.00
SJVAPCD SOx ERCs from Certificate No. 5-4585-5	4.00	0	0	0
878 pounds of SJVAPCD NOx ERCs, or 0.439 tons of MDAQMD NOx ERCs from Certificate No. 5-4990-2	0	878.00	0	0

As described previously, since CEMEX is an existing Major source of air contaminants for SOx, NOx, VOCs, and PM-10, all new sources of emissions, for these pollutants have to be fully offset.

Therefore, and pursuant to Regulation XIII, emission reduction credits (ERCs) were purchased from Sierra Power Corporation and transferred to CEMEX to offset the applicable annual pollutant emissions produced by the additional engines. The ERCs were transferred from the SJVAPCD to MDAQMD. A copy of the ERC transfer package is included in the Application package; copy is in Appendix A, summarized below and in Table 5.

The following ERC amounts were transferred to CEMEX from Sierra Power Corporation:

- 23 pounds PM10;
- 878 pounds NOx, and;
- 4 pounds SOx.

The applicant has proposing a 1.3 to 1 emission offset for transfer from the SJ Valley to the Mojave Desert AQMD and an additional 2:1 NOx for VOC's as the purchased ERC's did not directly include VOC credits.

Pursuant to District Rule 1301 – *New Source Review Definitions*, CEMEX is an existing Major Facility for CO, NO_x, VOC and PM10. This section of the MDAQMD is classified as ‘attainment/unclassified’ by USEPA and CARB for CO and SO₂, and Non-Attainment for Ozone and PM-10. Therefore, and pursuant to District Rule 1303 – *New Source Review Requirements*, the proposed equipment is subject to both BACT and Offset requirements for the Nonattainment Air Pollutant/Precursors of NO_x, VOC and PM10. Additionally, and since CEMEX is a major source of PM10, and since SO_x is a PM10 precursor, CEMEX has proposed to offset all SO_x emissions as well.

Table 6 of this document summarizes emissions from the proposed three new engines, including the applicable ratios. The results indicate an excess in ERCs, once the calculations are made. The calculated emissions are based on engine operating limitations that will be mandated by permit conditions’ and as indicated in Tables 1, 2, and 3 previously in this document.

3. *Determination of Requirements for Toxic Air Contaminants* **[District Rule 1302(C)(5)]**

a. New Source Review for Toxic Air Contaminants, District Rule 1320

Pursuant to District Rule 1320 – *New Source Review for Toxic Air Contaminants*, CEMEX is subject to both State and Federal Toxic New Source Review, as CEMEX is a Modified Facility which has the potential to emit Toxic Air Contaminants, and contains Emissions Units which are subject to an Airborne Toxic Control Measure (State T-NSR). CEMEX does have the potential to emit 10 tons per year of a single Hazardous Air Pollutant (Federal T-NSR) and/or 25 tpy of a combination of HAPs.

Pursuant to the requirements of District Rule 1320, an applicability analysis of state and federal air toxic regulations was conducted for the proposed equipment (State T-NSR and Federal T-NSR, respectively). The State T-NSR and Federal T-NSR analyses are described below:

Section (E)(1)(b) of District Rule 1320 requires that if any ATCM applies to the proposed equipment, the requirements of that ATCM shall be added to the District permit.

This new equipment is also subject to the State ATCM for Stationary and Portable Engines; Stationary, ATCM 17 CCR 93115, is applicable to the emergency firewater pump and the portable, ATCM 17 CCR 93116, is applicable to the two diesel powered air compressors.

Pursuant to District Rule 1320, section (E)(2), State T-NSR also requires an Emission Unit Prioritization Score to be calculated utilizing the most recently approved CAPCOA Facility Prioritization Guidelines, the most recently approved OEHHA Unit Risk Factor for cancer potency factors, and the most recently approved OEHHA Reference Exposure Levels (RELs) for non-cancer acute factors, and non-cancer chronic factors. Therefore, and pursuant to District Rule 1320 a Prioritization Score (PS) is calculated for these, three new emissions devices, based on the proposed potential to emit values. The prioritization score from these engines are summarized below:

Table 7: District Rule 1320 Prioritization Scores from the three new Proposed Engines

Three New Proposed Engines	Cancer Priority	Acute Non-cancer Priority	Chronic Non-cancer Priority
	0.0183	0.0000	0.0000

Distance to nearest receptor is 5638.8 meters. The engines will be permitted under the Quarry Plant's facility; therefore, all toxic assessments were taken from the Quarry Plant.

The Prioritization Score from the proposed engines, quantified using HARP2, is 0.0183, which by definition is considered a "Low Priority" emission source, and the associated health risk is considered acceptable.

4. Control of Toxic Air Contaminants from Existing Sources, District Rule 1520

Pursuant to District Rule 1520, the applicant submitted a 2018 Comprehensive Emission Inventory Report (CEIR), which was inputted into the HOTSPOTS ANALYSIS AND REPORTING PROGRAM EMISSION INVENTORY MODULE VERSION 2.1.0, (HARP2) Software program for subsequent analysis and results.

This methodology is consistent with the 2016 CAPCOA Facility Prioritization Guidelines, and is based on a receptor distance of 5638.8 meters.

Table 8, below, summarizes the CEMEX, Quarry Plant post-modification prioritization scores. As shown, the combined facility Prioritization Score is 1.2544. This score is between 1 and 10, and therefore, CEMEX Quarry Plant is categorized as an "Intermediate Priority" facility as defined by District Rule 1320, section (E)(2)(b). Therefore, no Contemporaneous Risk Reduction is required as a result of adding the proposed engines.

Table 8: District Rule 1520 Facility Prioritization Scores including three new Proposed Engines.

Including Three New Proposed Engines	Cancer Priority	Acute Non-cancer Priority	Chronic Non-cancer Priority
	1.2544	0	0.1314

5. *Federal T-NSR:*

Pursuant to section (F)(1) of District Rule 1320, the Modified Facility/Emissions Unit was analyzed to determine if any current, enforceable Maximum Achievable Control Technology (MACT) standards apply to the affect Emission Units.

The New Emergency Firewater engine is subject to NSPS, 70 CFR Part 60, Subpart IIII—Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, and must comply with the emission standards as summarized in Table 4 of Subpart IIII as shown below.

For full Regulations, see: https://www.ecfr.gov/cgi-bin/text-idx?rgn=div6&node=40%3A7.0.1.1.1.98#se40.8.60_14205

Table 4 to Subpart IIII of Part 60—Emission Standards for Stationary Fire Pump Engines

[As stated in §§60.4202(d) and 60.4205(c), you must comply with the following emission standards for stationary fire pump engines]

Maximum engine power	Model year(s)	NMHC + NO _x	CO	PM
KW<8 (HP<11)	2010 and earlier	10.5 (7.8)	8.0 (6.0)	1.0 (0.75)
	2011 +	7.5 (5.6)		0.40 (0.30)
8≤KW<19 (11≤HP<25)	2010 and earlier	9.5 (7.1)	6.6 (4.9)	0.80 (0.60)
	2011 +	7.5 (5.6)		0.40 (0.30)
19≤KW<37 (25≤HP<50)	2010 and earlier	9.5 (7.1)	5.5 (4.1)	0.80 (0.60)
	2011 +	7.5 (5.6)		0.30 (0.22)
37≤KW<56 (50≤HP<75)	2010 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2011 + ¹	4.7 (3.5)		0.40 (0.30)
56≤KW<75 (75≤HP<100)	2010 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2011 + ¹	4.7 (3.5)		0.40 (0.30)
75≤KW<130 (100≤HP<175)	2009 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2010 + ²	4.0 (3.0)		0.30 (0.22)
130≤KW<225 (175≤HP<300)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009 + ³	4.0 (3.0)		0.20 (0.15)
225≤KW<450 (300≤HP<600)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009 + ³	4.0 (3.0)		0.20 (0.15)
450≤KW≤560 (600≤HP≤750)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009 +	4.0 (3.0)		0.20 (0.15)
KW>560 (HP>750)	2007 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2008 +	6.4 (4.8)		0.20 (0.15)

¹For model years 2011-2013, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 revolutions per minute (rpm) may comply with the emission limitations for 2010 model year engines.

²For model years 2010-2012, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2009 model year engines.

³In model years 2009-2011, manufacturers of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2008 model year engines.

Table 9 below summarizes the requirements of Subpart IIII and those from the engine's manufacturer.

Table 9: Comparison of Emission requirements of Subpart IIII and proposed Fire Pump Engine.

Emission Standards		
Pollutant	Subpart IIII g/Hp-hr	Proposed Emissions DIESEL IC ENGINE, EMERGENCY WATER PUMP, g/Hp-hr
NO _x + NMHC	3.0	2.7
CO	NA	0.7
PM	0.15	0.11

In conclusion, the emissions from the proposed Fire Pump Engine is below the requirements of subpart IIII, therefore, the proposed Fire Pump Engine meets the emissions requirements of Subpart IIII.

The two proposed portable Air Compressors are Tier IV Final Engines that meet the most stringent emission requirements for off-road engines.

Furthermore, 40 CFR Part 63, Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines is Applicable to the proposed engines.

For full text, see: <https://www.ecfr.gov/cgi-bin/text-idx?c=ecfr;rgn=div6;view=text;node=40%3A14.0.1.1.1.1;idno=40;sid=e94dcfde4a04b27290c445a56e635e58;cc=ecfr>

§63.6602 of Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

§63.6590(c), *Stationary RICE subject to Regulations under 40 CFR Part 60*. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. Since the proposed firewater pump engine meets the requirements of Subpart IIII, no further requirements apply for such engines under this part, §63.6590(c)(4); **(4) A new or reconstructed spark ignition 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions; (Facility is a HAP Major Source)**

Pursuant to the requirements in District Rule 1302 B(1)(a)(ii), an analysis of Alternative Siting is not required as the proposed equipment is not a Federal Major Modification as defined in District Rule 1302.

District Rule 1302, Procedure

District Rule 1302(B)(1)(ii), Requirements for Facilities Requiring Offsets; requires the applicant of all new and modified Facilities requiring offsets pursuant to District Rule 1303(B):

1. To provide an alternative siting analysis including an analysis of alternative sites, sizes and production processes pursuant to 42 U.S.C. §7503(a)(5) (Federal Clean Air Act §173(a)(5)). Such analysis shall be functionally equivalent to that required pursuant to Division 13 of the California Public Resources Code (commencing with section 21000).

Since the proposed change is not a Federal Major Modification, the requirements of Rule 1302(B)(1)(a)(ii) a.1 and a.2 do not apply; see discussion below.

2. Provide a statewide compliance certification stating that all Facilities which are under the control of the same person (or persons under common control) in the State of California are in compliance with all applicable emissions limitations and standards under the Federal Clean Air Act and the applicable implementation plan for the air district in which the other Facilities are located.

Since the proposed change is not a Federal Major Modification, the requirements of Rule 1302(B)(1)(a)(ii) a.1 and a.2 do not apply; see discussion below.

3. Provide a District Rule 1310 applicability analysis sufficient to show that the Facility or Modification is or is not a Federal Major Facility or a Federal Major Modification as defined in District Rule 1310(C).

The PTE from the proposed engines are significantly lower than the Federal Major Modification threshold, therefore the proposed modification is NOT a Federal Major Modification and District Rule 1310 is NOT applicable; see Table TBD below for emission threshold and comparison with proposed engines combined PTE.

4. Demonstrate that the requirements of subsections (B)(1)(a)(ii) a.1 and a.2 shall not apply if the Facility or Modification has been determined to not be a Federal Major Facility or a Federal Major Modification as defined in District Rule 1310(C)(6) and (7) or the Facility has previously applied for and received a valid Plantwide Applicability Limit (PAL) pursuant to the provisions of District Rule 1310(F).

The PTE from the proposed engines are significantly lower than the Federal Major Modification threshold, therefore the proposed modification is NOT a Federal Major Modification and District Rule 1310 is NOT applicable; see Table 10 below for emission threshold and comparison with proposed engines' PTE.

Additionally, and since the change is not a Federal Major Modification, the requirements of Rule 1302(B)(1)(a)(ii) a.1 and a.2 do not apply.

District Rule 1310, Table 2, summarizes Federal Significant Emissions Increase Threshold quantities. For full text, see: <http://mdaqmd.ca.gov/home/showdocument?id=486>

District Rule 1310, Table 2

<u>POLLUTANT</u>	<u>EMISSION RATE</u> (Within an attainment or unclassified area)	<u>EMISSION RATE</u> (Within an ozone nonattainment area)	<u>EMISSION RATE</u> (Within a moderate PM ₁₀ nonattainment area)
Carbon Monoxide (CO)	100 tpy	100 tpy	100 tpy
Lead (Pb)	0.6 tpy	0.6 tpy	0.6 tpy
Oxides of Nitrogen (NOx)	40 tpy	40 tpy	40 tpy
PM10	15 tpy	15 tpy	15 tpy
Volatile Organic Compounds (VOC)	40 tpy	40 tpy	40 tpy
Sulfur Dioxide (SO2)	40 tpy	40 tpy	40 tpy

CEMEX is located within a Federal non-attainment area, therefore the Emission Rates of column 2 are applicable. The proposed emission increases are well below the Federal Significant Emissions Increase Thresholds as shown in Table 10 below.

Table 10: Federal Significant Emissions Increase Threshold Analysis					
Permit Number	SOX Lbs/Yr	NOx Lbs/Yr	VOC Lbs/Yr	PM10 Lbs/Yr	CO Lbs/Yr
E013353	0.17	121.53	3.4723	4.86119	31.25
B013522	0.98	78.91	37.4829	3.94557	690.47
B013523	0.98	78.91	37.4829	3.94557	690.47
Total Lbs/Yr	2.14	279.35	78.44	12.75	1412.20
Tons Per Year	0.00107	0.13968	0.03922	0.00638	0.70610
From District Rule 1310, Table 2: Federal Significant Emissions Increase Threshold quantities in TPY	40	40	40	15	100
Is Significant Threshold Triggered?	No	No	No	No	No

6. Determination of Requirements for Prevention of Significant Deterioration [District Rule 1302(C)(6)]

a. PSD Analysis

Rule 1302(B)(1)(a)(i)c requires that any application for an ATC or modification to a Permit to Operate (PTO) includes: "A District Rule 1600 applicability analysis sufficient to determine whether the Facility or Modification is or is not a new PSD Major Source or a PSD Major Modification as defined in District Rule 1600(B) using the procedures set forth in 40 CFR 52.21 (a)(2)."

CEMEX is located in an area designated as nonattainment for National Ambient Air Quality Standards (NAAQS) for criteria pollutants PM₁₀, and Ozone, and their precursors. CEMEX is an existing PSD Major Source for CO, NO_x, VOCs, and PM₁₀. However, CEMEX does not have a PSD permit since permitting of most of the emissions units' pre-dates PSD regulations.

Emissions from the proposed new engine are compared with PSD Significant Emissions Increases (SEI) thresholds for each PSD regulated pollutant to determine if additional PSD analysis and/or requirements are triggered. This comparison is summarized in Table 11 below.

Table 11: PSD Analysis

Table 11: PSD Analysis						
Permit Number	SOX Lbs/Yr	NOx Lbs/Yr	VOC Lbs/Yr	PM10 Lbs/Yr	PM10 Lbs/Yr	CO Lbs/Yr
E013353	0.17	121.53	3.4723	4.86119	4.86119	31.25
B013522	0.98	78.91	37.4829	3.94557	3.94557	690.47
B013523	0.98	78.91	37.4829	3.94557	3.94557	690.47
Total Lbs/Yr	2.14	279.35	78.44	12.75	12.75233	1412.20
Tons Per Year	0.00107	0.13968	0.03922	0.00638	0.00638	0.70610
PSD Net Emissions Increase. Threshold quantities are in TPY	40	40	40	15	10	100
Is Significant Emission Increase Triggered?	No	No	No	No	No	No

The results of the emissions comparison with the appropriate pollutant PSD thresholds is that the modification DOES NOT trigger the PSD Significant Increase Thresholds, therefore no further PSD analysis is required.

b. NAAQS Impact Analysis

District Rule 1302, section (D)(5)(b)(iv) requires that any new or Modified Facility located in an area classified by USEPA as nonattainment or unclassifiable shall determine if the Facility will cause or contribute to a violation of the National Ambient Air Quality Standards (NAAQS).

Note: CEMEX is located in an area of the MDAQMD that is designated as attainment for CO and SOx. It is determined that proposed modification, discussed herein, through implementation of BACT, will not contribute to a violation of the NAAQS.

7. Rules and Regulations Applicable to the Proposed Project

District Rules

Rule 201/203 – *Permits to Construct/Permit to Operate*. Any equipment which may cause the issuance of air contaminants must obtain authorization for such construction from the Air Pollution Control Officer. CEMEX is in compliance with this rule as they appropriately applied for a District permit for all new equipment and maintains District permits for all residing equipment.

Rule 204 – *Permit Conditions*. To assure compliance with all applicable regulations, the Air Pollution Control Officer (Executive Director) may impose written conditions on any permit. The District has imposed permit conditions to ensure CEMEX complies with all applicable regulations.

Rule 206 – *Posting of Permit to Operate*. Equipment shall not operate unless the entire permit is affixed upon the equipment or kept at a location for which it is issued and will be made available to the District upon request.

Rule 207 – *Altering or Falsifying of Permit*. A person shall not willfully deface, alter, forge, or falsify any issued permit.

Rule 209 – *Transfer and Voiding of Permits*. CEMEX shall not transfer, whether by operation of law or otherwise, either from one location to another, from one piece of equipment to another, or from one person to another. When equipment which has been granted a permit is altered, changes location, or is no longer operated, the permit shall become void.

Rule 210 – *Applications*. CEMEX has provided all the required information to correctly address the proposed equipment pursuant to this rule. There were instances, however, when additional information was requested, causing a thirty (30) day application clock to restart.

Rule 212 – *Standards for Approving Permits*. This rule establishes baseline criteria for approving permits by the District for certain projects. In accordance with these criteria, the proposed modifications and application does not cause issuance of air contaminants in violation of Sections 41700 or 41701 of the State Health and Safety code.

Rule 221 – *Federal Operating Permit Requirement*. CEMEX, is in compliance with this rule, as they currently hold and maintain a Federal Operating Permit.

Rule 301 – *Permit Fees*. The proposed equipment will increase CEMEX annual permit fees by the applicable amounts described in section (E) of this rule.

Rule 401 – *Visible Emissions*. This rule limits visible emissions opacity to less than 20 percent (or Ringlemann No. 1). In normal operating mode, visible emissions are not expected to exceed 20 percent opacity.

Rule 402 – *Nuisance*. This rule prohibits facility emissions that cause a public nuisance. The proposed modifications and associated equipment is required by permit condition to employ good engineering and operational principles in order to minimize emissions and the possibility of a nuisance.

Rule 404 – *Particulate Matter Concentration*. This rule requires that no person exceed the particulate matter concentration provided in Table 404(a). Since Ultra Low Sulfur fuel is the only fuel that will be combusted by the proposed engines, and through the use of Tier III and Tier IV Final engines, the emitted particulate concentration will comply with the requirements of this rule.

Rule 405 – *Solid Particulate Matter – Weight*. This rule requires that no person exceed the particulate matter process weights provided in Table 405(a). Since Ultra Low Sulfur fuel is the only fuel that will be combusted by the proposed engines, and with the use of Tier III and Tier IV Final engines, the emitted particulate concentration will comply with the requirements of this rule; emissions will not exceed the limits in Table 405(a) and the proposed engine will therefore meet the requirements of this rule.

Rule 408 – *Circumvention*. This rule prohibits hidden or secondary rule violations. The proposed modifications as described are not expected to violate Rule 408.

Rule 430 – *Breakdown Provisions*. Any Breakdown which results in a violation to any rule or regulation as defined by Rule 430 shall be properly addressed pursuant to this rule.

Regulation IX:

Rule 900 – *Standards of Performance for New Stationary Sources (NSPS)*. Rule 900 adopts all applicable provisions regarding standards of performance for new stationary sources as set forth in 40 CFR 60. These regulations are periodically updated to reflect actions published in the Federal Register (FR) by the EPA.

40 CFR 60 Subpart IIII – New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines. This regulation applies to the proposed new emergency fire pump, and limits its allowable emissions. Emissions from the engine have been compared with the requirements of Subpart IIII, and it has been determined that the proposed engine will comply with the requirements of this NSPS.

Regulation X – *National Emission Standards for Hazardous Air Pollutants*. Pursuant to Regulation X, CEMEX is required to comply with all applicable ATCMs and under state law, a federal National Emission Standards for Hazardous Air Pollutants (NESHAP) becomes the State ATCM, unless the Air Resources Board (ARB) has already adopted an ATCM for the source category and associated hazardous air pollutant(s). In the case of the proposed new equipment,

there are two applicable State ATCM's. ATCM 17 CCR 93115, the ATCM for Stationary Compression Ignition Engines, is applicable to the proposed diesel fired emergency firewater pump; the engine is a certified Tier III engine and meets the emissions requirements of this ATCM.

The two proposed portable diesel fired air compressors are equipped with Tier IV Final engines, the least emitting engines for this class and category of equipment, and considered to be BACT and T-BACT. These engines also meet the requirements of the State ATCM 17 CCR, 93116, the ATCM for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater.

Regulation XI – Source Specific Standards

Rule 1160 – Internal Combustion Engines

The proposed new engines are not subject to District Rule 1160.

Applicability section, (a) states *This rule applies to any stationary Internal Combustion Engine rated at 50 or more brake horsepower (bhp), when located within the Federal Ozone Non-Attainment Area, that does not meet the following: (iv) Any Internal Combustion Engine that is an Emergency Internal Combustion Engine provided that the Internal Combustion Engine does not operate more than 100 hours for non-emergency use in any rolling twelve (12) month period.*

For full text, see: <http://mdaqmd.ca.gov/home/showdocument?id=6631>

The use of the emergency firewater pump engine shall be restricted by permit condition to no more than 50 hours in any rolling twelve (12) month period. Therefore, District Rule 1160 is not applicable to this device.

The two proposed portable air compressors are Portable and NOT Stationary; therefore, District Rule 1160 is not applicable to these engines either.

Regulation XII – Title V Permits

This regulation contains requirements for sources which must have a FOP. CEMEX currently has a FOP and is expected to comply with all applicable rules and regulations.

Rule 1201 – Federal Operating Permit Definitions.

CEMEX is defined as a federal Major Facility pursuant to this rule.

Rule 1203 – Federal Operating Permits.

The proposed new engines are subject to New Source Review and are being processed pursuant to District Rule 1302, Procedures, which allows for Significant Modifications to be processed concurrent with NSR actions. This procedure conforms to all applicable provisions of District Regulation XII. Further, this permit modification will be noticed similarly to District Rule 1207 requirements and in accordance with District Rule 1302.

This document represents the preliminary determination for the proposed modifications to the CEMEX FOP. This proposed Significant Modification will also be properly noticed pursuant to District Rule 1207, as required.

Rule 1205 – *Modifications of Federal Operating Permits.*

The proposed new engines are classified as a Significant Permit Modification to the CEMEX Federal Operating Permit (FOP), and therefore, this permit modification will be issued in accordance with the provisions of District Rule 1302 pursuant to Rule 1203.

Rule 1207 – *Notice and Comment.*

This NSR permitting action is being noticed concurrent with the Significant Modification of the CEMEX Federal Operating Permit. Notably, this affords the public the right to petition USEPA to reconsider the decision to not object to the permit action.

Rule 1208 – *Certification.*

CEMEX included a Certification of Responsible Official as required with the submitted application for the proposed equipment.

Rule 1211 – *Greenhouse Gas Provisions of Federal Operating Permits.*

CEMEX is an existing Major GHG Facility pursuant to Rule 1211; the addition of the proposed equipment will not trigger any additional GHG requirements.

Regulation XIII – *New Source Review*

Rule 1302 – *Procedure.*

This rule applies to all new or Modified Facilities and requires certain requirements to be fulfilled when submitting an application. All applicable requirements of this rule are discussed in this NSR document as part of the Analysis procedure. Certification of compliance with the Federal Clean Air Act, applicable implementation plans, and all applicable District rules and regulations have been addressed. The Authority to Construct (ATC) application package for the proposed equipment includes sufficient documentation to comply with Rule 1302(D)(5)(b)(ii). Permit conditions for the proposed engines will require compliance with Rule 1302(D)(5)(b)(iii).

Rule 1303 – *Requirements.* This rule requires BACT and offsets for selected facility modifications. The Proposed engines do trigger BACT and offset requirements, and will meet BACT requirements, additionally, the engines emissions must be fully offset for NOX, VOC, and PM10, which will be accomplished through use of their wholly owned ERC's; see previous sections of this document for additional details.

Rule 1304 – *Emissions Calculations.* The Proposed Emissions from the proposed modifications were calculated pursuant to section (B)(1)(a) of this rule.

Rule 1310 – *Federal Major Facilities and Modifications.* Emissions from the proposed new engines are determined to NOT be a Federal Major Modification as calculated in accordance with Rule 1310(E)(1)(a) as the Projected Actual Emissions, calculated pursuant to District Rule

1310 (E)(3)(c), will not exceed the Federal Major Modification Thresholds. Calculation methodologies are similar to those required by District Rule 1304(B)(1)(a).

Rule 1320 – *New Source Review for Toxic Air Contaminants*. Pursuant to the requirements of District Rule 1302, an applicability analysis of State and Federal air toxic regulations was conducted for the proposed modifications (State T-NSR and Federal T-NSR, respectively) and is discussed in further detail in this document.

Rule 1520 – *Control of Toxic Air Contaminants from Existing Sources*. This permit action is subject to Rule 1520, as CEMEX is an existing Major Facility as it has a facility PTE greater than ten (10) tons per year for CO, NO_x, SO₂, PM_{10/2.5}, and VOC, as well as has a PTE to emit a TAC. A facility prioritization analysis was conducted and it was determined that the Quarry facility will remain Low Priority Facility. The River Plant will remain a High Priority facility as its prioritization score is higher than 10. It should be noted however, that the addition of the proposed two portable air compressors will have an almost negligible effect to the existing health risks associated with the River Plant.

Regulation XVI, Rule 1600 – *Prevention of Significant Deterioration*

The purpose of this regulation is to set forth requirements for all new Major PSD Facilities and Major PSD Modifications which emit or have the potential to emit a PSD Air Pollutant pursuant to the requirements of 40 CFR 52.21. The proposed modification does not constitute a new Major PSD Facility or a Major PSD Modification; therefore, PSD does not apply to the proposed project. A detailed discussion of PSD occurs in the above sections of this document.

State Regulations

Regulation XI— Source Specific Standards:

District Rule 1160 —Internal Combustion Engines

This rule is applicable because CEMEX is located in a federal ozone non-attainment area.

Regulation XII — Federal Operating Permits

This regulation contains requirements for sources which must have a federal operating permit. The identified changes constitute a significant modification of the Title V permit. Specific requirements of Regulation XII are stipulated as shown below.

Rule 1202 — Applications

This rule designates that official applications will be used as necessary under Regulation XII and outlines the specified information which shall be included on the official application to the Air Pollution Control Officer to determine completeness as well as provides a timeline for that determination. This application includes official District forms. The District has evaluated this permitting action and concluded that the proposed project requires a significant Title V Modification and will be processed as such and in accordance with the procedure specified in the rule.

Rule 1203 — Federal Operating Permits (FOP)

The rule defines the permit operating term, stipulates the process by which FOPs, Significant Modifications to FOPs and Renewals of FOPs shall be issued. This rule further identifies restrictions on issuance, permit contents, operational flexibility, compliance certification, permit shield, and violation of permit conditions. The proposed FOP action is considered a significant permit modification. The District will submit this SOB and Draft Title V FOP to the EPA and CARB and make documents available for public review and comment within the specified comment period in accordance with the procedure outlined in Rule 1203(B)(1).

Rule 1205 — Modifications of Federal Operating Permits

This rule specifies the process by which FOPs are modified. The District will determine if the action constitutes a significant permit modification and will incorporate the changes as required by Regulation XII, as applicable.

Rule 1302 — Procedure

Rule 1302 outlines the procedures for preparing an ATC permit application.

Rule 1303 — Requirements

The BACT and offset requirements of Regulation XIII are addressed in this rule.

The BACT and offset requirements of Regulation XIII are addressed in this rule.

BACT: Any new or modified Permit Unit which emits, or has the Potential to Emit, 25 lbs/day or more of any Nonattainment Air Pollutant shall be equipped with BACT. Plus any new or Modified Facility which emits, or has the Potential to Emit, 25 tpy or more of any Nonattainment Air Pollutant shall be equipped with BACT for each new Permit Unit. BACT applies to the new engines for PM₁₀, NO_x and ROC per Rule 1303 (A)(3) since the facility has a PTE > 25 tpy of these non-attainment pollutants.

Offsets: Based on the emissions analysis presented in earlier in this document, the facility is proposing the use of ERCs to offset the non-attainment pollutants. Rule 1305 describes the techniques for calculating the required offsets, including the use of ERCs.

Rule 1304 — Emissions Calculations

The CEMEX modification involves new equipment installation of one new 4SRB diesel fired emergency firewater pump engine, and two new diesel fired, Tier IV Final engine equipped portable air compressors. This rule outlines how to account for the associated emission increases.

Rule 1305 — Emissions Offsets

This Rule provides the procedures and formulas to determine the eligibility of, calculate the amount of, and determine the use of Offsets required pursuant to the provisions of District Rule 1303(B). The provisions of this rule have been followed in the netting analysis and a summary of those results are included in this document. Screen shot of that analysis are also provided in other section of this document. A live Excel spreadsheet is also available for review at the District office upon request.

Rule 1310— Federal Major Facilities and Modifications

This rule sets additional requirements for Federal Major Facilities and Modifications. CEMEX is an existing major federal source. Nonetheless, the modifications proposed in the CEMEX project is less than the federal significant emissions increase threshold, thus the project is not a Federal Major Modification, and this rule is not applicable.

Rule 1320 —New Source Review for Toxic Air Contaminants

This rule is applicable to all new, Modified or Relocated Facilities or Permit Units which emit or have the potential to emit any HAP, TAC, or Regulated Toxic Substance. MDAQMD Rule 1320 follows a step-wise process for evaluating applications for compliance with air toxics requirements. The initial steps are outlined below, including applicability of Federal and State T-NSR, and conducting HRAs, if applicable for each EU. Note: The prioritization score for the Quarry facility is quantified as Low Priority and therefore an HRA is not required for that facility. The River plant has previously submitted an HRA since their prioritization score was higher than 10; revised Emissions inventories were submitted as well. These items are presently under review at the MDAQMD. That said, the proposed portable air compressors will have an insignificant effect on the existing health effects from the River Plant.

Federal T-NSR

The CEMEX facility is currently considered a Major Source of HAP, and subject to Federal T-NSR. MDAQMD Rule 1320 requires that if a facility is subject to Federal T-NSR, any applicable NESHAP standards will apply. The proposed engines are required to comply with any applicable currently enforceable NESHAP standards, or a case-by-case NESHAP standard as determined by the MDAQMD. One MACT standards is applicable to the new engines, Subpart ZZZZ. The emergency firewater pump engine will comply with this requirement and NSPS, Subpart IIII.

State T-NSR Program Analysis (State T-NSR)

This subsection requires the applicant and MDAQMD to identify and include in the permitting analysis any applicable and currently enforceable California Air Toxics Control Measures (ATCM). The proposed diesel fired Reciprocating IC Engines are subject to a California ATCM's as previously discussed.

Health Risk Assessment (HRA)

Under the State T-NSR, Rule 1320 requires evaluation of each Emission Unit using prioritization scoring and an HRA, if the prioritization score is high. The Quarry facility has a prioritization score of less than 1, and therefore an HRA is not required for this facility. The River plant has prioritization score that is over 10 and therefore considered a High Priority facility. As previously discussed, an HRA for this facility has been submitted and is under review.

Regulation XIV — Emission Reduction Credit Banking

Rule 1402 established an Emission Reduction Credit Registry by which emission reduction credits can be banked by a facility that has met all the applicable requirements of the rule. CEMEX is proposing to use ERCs transferred from the SJVAPCD. Copies of the ERCs can be found in the appendix section of this document as part of the CEMEX submitted application.

The use of ERC's from an upwind air district, which has a non-attainment status that is higher than the receiving District, is allowed by rule as previously discussed.

CEMEX has proposed to use these purchased and transferred credits to offset the proposed new engines. The MDAQMD has reviewed and approved that request.

The emissions, ERC analysis, and ERC balance, is shown in greater detail earlier in this document.

Rule 1520 — Control of Toxic Air Contaminants from Existing Sources

This rule applies on a facility-wide basis requiring public notice and/or risk reduction at elevated levels of health risk for existing facilities based on actual levels of TAC emissions.

2018 emissions inventory resulted in a Prioritization score for Cancer of 1.2544 for the Quarry Plant; this prioritization score is less than 1. Therefore, the facility is considered an "Low Priority" facility, and the associated health risk is considered acceptable. The River plant has a prioritization of over 10, and as previously discussed, an HRA has been submitted and is under review by the MDAQMD. That said the portable air compressors are considered Toxic Best Available Control Technology (T-BACT), as they are Tier IV Final Engines, which are considered the least emitting equipment available for this class and category of equipment.

Regulation XVI — Prevention of Significant Deterioration (PSD)

This rule is applicable to projects that have emissions of attainment pollutants greater than the new Major PSD Facilities and Major PSD Modifications thresholds. An applicability assessment of PSD has been performed and it is determined that the proposed new engines are not a PSD Major Modification.

8. NSR Preliminary Decision - Conclusion

The District has reviewed the proposed new emission unit's applications for CEMEX and conducted a succinct written analysis as required by District Rule 1302, section (D)(1)(b) and District Rule 1203, section (B)(1)(a). The District has determined that the proposed equipment and application are in compliance with all applicable District, State, and Federal rules and regulations as proposed and when operated in terms of the permit conditions stated below.

9. Operating Conditions

The following equipment descriptions and operating conditions will be placed on the District's Authorities to Construct (ATC) Permits' and in Part III of CEMEX's FOP. Note that all new and modified equipment descriptions and permit conditions will be in redline/strikethrough form on the Draft Title V Permit.

Description: DIESEL IC ENGINE, EMERGENCY FIREWATER PUMP consisting of: Year of Manufacture is 2013. Engine is a certified Tier III 4-Stroke Rich Burn (4SRB) diesel engine, EPA Family DJDXL09.0114; EPA Certificate Number DJDXL09.0114-005; Engine Model Year 2013; DOES NOT HAVE A CORRESPONDING CARB EO CERTIFICATE. Engine meets

USA EPA (NSPS) Tier 3 Emissions Certified Off-Road (40 CFR Part 89) and NSPS Stationary (40 CFR Part 60 Sub Part IIII). Engine Exhaust Flow is TBD cfm at TBD Degrees F.

Stack height is TBD feet high and Stack Diameter is TBD inches. Equipment elevation is 3620 feet above sea level.

One John Deere, Diesel fired internal combustion engine Model No. 6090HFC47A and Serial No. RG6080L117349, After Cooled, Electronic Control Module, High Pressure Fuel Injection (also EM), Turbo Charged, producing 422 bhp with 6 cylinders at 1760 rpm while consuming a maximum of 17 gal/hr. This equipment powers a Pump Model No. and Serial No., rated at.

EMISSIONS RATES

Emission Type	Est. Max Load	Unit
CO	0.7	gm/bhp-hr
NOx	2.6	gm/bhp-hr
NOx+NMHC	2.7	gm/bhp-hr
PM10	0.11	gm/bhp-hr
VOC	0.1	gm/bhp-hr

Conditions:

1. This equipment shall be installed, operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles in a manner consistent with good air pollution control practice for minimizing emissions. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.

[District Rule 1302(C)(2)(a)]

2. A non-resettable hour meter with a minimum display capability of 9,999 hours shall be installed and maintained on this unit to indicate elapsed engine operating time.

[40 CFR 60.4209; Title 17 CCR 93115.10(d)]

3. This engine shall only be fired on diesel fuel that meets the following requirements, or an alternative fuel approved by the ATCM for Stationary CI Engines: a. Ultra-low sulfur concentration of 0.0015% (15 ppm) or less, on a weight per weight basis; and, b. A cetane index or aromatic content, as follows: 1. A minimum cetane index of 40; or, 2. A maximum aromatic content of 35 volume percent.

[17 CCR 93115.5(a) and 40 CFR 80.510(c)] Note: Use of CARB certified ULSD fuel satisfies the above requirements.

4. This unit shall be limited to emergency use only, defined as in response to a fire or when commercially available power has been interrupted. In addition, this unit shall be operated no more than 50 hours per rolling consecutive twelve month period for testing and maintenance, unless NFPA-25 (current edition) authorizes additional time: If the 50 hour limit is exceeded due to NFPA requirements, the owner/operator is to have the authorizing section of NFPA 25 available for review at all times. Time required for source testing will not be counted toward the 50 hour rolling annual limit. [17 CCR 93115.6(b), District Rule 204]

5. The owner/operator shall maintain an operations log for this unit current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and Federal personnel upon request. The log shall include, at a minimum, the information specified below: a. Date of each use and duration of each use (in hours per hour meter); b. Reason for use (testing & maintenance, emergency, required emission testing); c. Rolling consecutive twelve month period operation in terms of fuel consumption (in gallons) or total hours; d. Records of all maintenance and inspections; and, e. Fuel sulfur concentration (the owner/operator may use the supplier's certification of sulfur content if it is maintained as part of this log).

[40 CFR 70.6(a)(3)(ii)(b), 40 CFR 60.4214, 17 CCR 93115.10(f), District Rule 204]

6. This engine is subject to the requirements of Title 17 CCR 93115, the Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition Engines, and 40 CFR 60 Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. [District Rule 204]

7. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.

[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]

Description: Two-DIESEL IC ENGINE, PORTABLE AIR COMPRESSORS, each, consisting of: A certified Tier 4f 4SRB, diesel-fueled engine manufactured in 2016. Engine Exhaust Flow is TBD cfm at TBD Degrees F. Stack height is TBD feet high and Stack Diameter is TBD inches. Equipment elevation is 3620 feet above sea level. One John Deere, Diesel fired internal combustion engine Model No. 6090HFC47A and Serial No. R06090L117349, After Cooled, Diesel Oxidation Catalyst, Diesel Particulate Filter, Selective Catalytic Reduction, producing 250 bhp with 6 cylinders at 2100 rpm while consuming a maximum of 10.1 gal/hr. This equipment powers a Compressor Model No. and Serial No. , rated at .

EMISSIONS RATES

Emission Type	Est. Max Load	Unit
CO	2.610	gm/bhp-hr
NOx	0.298	gm/bhp-hr
PM10	0.015	gm/bhp-hr
SOx	0.004	gm/bhp-hr
VOC	0.142	gm/bhp-hr

Conditions:

1. This equipment shall be installed, operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles in a manner consistent with good air pollution control practice for minimizing emissions. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.

[District Rule 1302(C)(2)(a)]

2. This diesel ICE and its associated equipment cannot be operated at the same engine-print (spot) for more than 365 consecutive days. This equipment must be moved within this facility or moved to another facility annually. The amount of time that the equipment is kept in the storage location does not count towards the residence requirement so long as the equipment is not set up in an operational configuration.

[Title 17 CCR 93116.2(a)(29)]

3. This unit shall only be fired on ultra-low sulfur diesel fuel whose sulfur concentration is less than or equal to 0.0015% (15 ppm) on a weight per weight basis per CARB Diesel or equivalent requirements; or alternative diesel fuel, or CARB diesel fuel utilizing fuel additives, that has been verified through the Verification Procedure for In-Use Strategies to Control Emissions from Diesel Engines.

[Title 17 CCR 93116.3(a)]

4. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this unit to indicate elapsed engine operating time.

[District Rule 1302(C)(2)(a)]

5. The owner/operator shall maintain an operations log for this unit, current and on-site (or at a central location), for a minimum of five (5) years, and this log shall be provided to District, State and Federal personnel upon request. The log shall include, at a minimum, the information specified below:

- a. Date of each use and duration of each use (in hours);
- b. Reason for use (regular prime use, emergency, testing & maintenance, etc.);
- c. Calendar year operation in terms of fuel consumption (in gallons) and total hours; and,
- d. Fuel sulfur concentration (may use the supplier's certification of sulfur content if it is maintained as part of this log).

[District Rule 1302(C)(2)(a)]

6. This portable, diesel-fired engine is certified to Tier 4 final emission standards and is therefore exempted from the requirements of section 93116.4 of Title 17 CCR 93116. To establish this exemption the Responsible Official (owner/operator) must provide the Certification Statement to the District and CARB when the engine initially satisfies the requirements of section 93116.4(a). This certification statement must list the following for each engine:

- a. The District permit number; and,
- b. The serial number.

Compliance Statements should be sent to the District via mail or electronically to reporting@mdaqmd.ca.gov

Compliance Statements should be mailed to CARB at:

ARB/PERP

P.O. Box 2038

Sacramento, CA 95812

[Title 17 CCR 93116.4(a)and(e)]

7. This unit is subject to the requirements of Title 17 CCR 93116, the Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater.

[Title 17 CCR 93116]

8. This engine shall not operate for more than 480 hours in any consecutive 12 month period.

[District Rules 1302 and 1320]

9. A facility wide Comprehensive Emission Inventory Report (CEIR) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.

[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]

C. Title V Permit/FOP – Significant Permit Modification

1. Proposed Changes to FOP

The owner/operator of CEMEX Construction Materials Pacific LLC, has submitted an application for Significant Permit Modification in parallel with the application for new District Permits associated with three new engines. The District is processing the proposed FOP changes in accordance with procedures specified in District Rule 1302(D)(1)(d). This preliminary decision also serves as the statement of basis and draft FOP.

2. Title V/FOP – Conclusion

The District has reviewed the application and proposed modifications to the CEMEX Federal Operating Permit. The District has determined that the proposed modification is in compliance with all applicable District, State, and Federal rules and regulations as proposed when operated in the terms of the operating conditions given herein.

D. Comment Period and Notifications

1. Public Comment

This preliminary determination will be publicly noticed on or before 07-22-19.

The 30-Day Public Commenting Period that will end at COB on 08-21-19.

Noticing Methods include the following, per District Rule 1207 (A)(1)(a) and District Rule 1302(D)(2) and (3):

- Published in newspapers of general circulation - Riverside Press Enterprise (Riverside County) and the Daily Press (San Bernardino County) on or before 07-22-19.
- Mailed and/or emailed to MDAQMD contact list of persons requesting notice of actions (see the contact list following the Public Notice in Appendix B) on or before 07-17-19.
- Posted on the MDAQMD Website at the following link:
<http://www.mdaqmd.ca.gov/permitting/public-notices-advisories/public-notices-permitting-regulated-industry>

2. Notifications

The preliminary determination was submitted via e-mail to EPA and CARB pursuant to District Rule 1207 for a forty-five (45) day review period on or before 07-17-19. The final modified FOP shall be issued on or about 09-03-19.

All correspondence as required by District Rules 1302 and 1207 were forwarded electronically to the following recipients:

Director, Office of Air Division
United States EPA, Region IX
75 Hawthorne Street
San Francisco, CA 94105
R9airpermits_AV_MD@epa.gov

Chief, Stationary Source Division
California Air Resources Board
P.O. Box 2815
Sacramento, CA 95812
Permits@arb.ca.gov

Field Operations Manager C/O Alejandra V Silva, via e-mail
CEMEX Construction Materials Pacific LLC
16888 North E Street
Victorville, CA 92392

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Appendix A Application



July 1st, 2019

Mr. Sam Oktay
Mojave Desert Air Quality Management District (MDAQMD)
14306 Park Avenue
Victorville, CA 92392-2310
soktay@mdaqmd.ca.gov

via e-mail

**Subject: Authority to Construct Permits: E013353, B013522, and B013523
CEMEX Construction Material Pacific, LLC
CEMEX – Black Mountain Quarry Plant and River Plant
Application for Two Portable Compressor Engines and One Emergency Fire Water Pump**

Dear Mr. Oktay:

CEMEX Construction Material Pacific, LLC (CEMEX), is submitting the enclosed update to the Authority to Construct Permit Application for the CEMEX - Black Mountain Quarry Plant (Apple Valley) and the River Plant (Victorville) facilities both located in San Bernardino County, California. The original application was submitted on May 1, 2019 to authorize the operation of two diesel-fired portable compressor engines and an emergency fire water pump.

The addition of these new emissions sources requires the use of Emission Reduction Credits (ERCs). This update addresses the use of ERC's for VOC offsets in addition the ERC's already represented for other pollutant offsets. Enclosed with the Permit Application is detailed information of the emission data for each piece of equipment and the emission offset documentation.

A Title V - Permit Amendment/Modification Form (Form 1202-N) has been submitted under a separate cover letter to supplement the attached Authority to Construct Permit Application.

If you have any questions or require additional information, please do not hesitate to contact me by email at alejandrav.silva@cemex.com or by phone at (760) 381-7649.

Sincerely,


Alejandra V Silva
Environmental Manager

Enclosures

c: Ms. Anna de la Garza (POWER Engineers) via email
Ms. Darlene Marie Bray, Director - Environmental, CEMEX USA (via e-mail)

Victorville Plant

16888 North E Street, Victorville, CA 92394-2999, Phone (760) 381-7600, Fax (760) 245-0191

AST 357-0932 157417.01.01 (2019-04-12) AG

WWW.POWERENG.COM

July 2019

AUTHORITY TO CONSTRUCT PERMIT APPLICATION

*CEMEX USA
CEMEX Construction Material Pacific, LLC
CEMEX – Black Mountain Quarry Plant and River Plant
San Bernardino County, California*



Submitted To:
*Mojave Desert Air Quality Management District
14306 Park Avenue
Victorville, California 92392-2310*

PROJECT NUMBER:
157417



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1.0 INTRODUCTION

1.1 Project Overview

CEMEX Construction Material Pacific, LLC (CEMEX) owns and operates CEMEX - Black Mountain Quarry Plant (Apple Valley) and River Plant (Victorville) both located in San Bernardino County, California. The Apple Valley site is a cement plant that consists of two kilns (Kiln Q2 and Kiln Q3) and associated clinker coolers and activated carbon injection (ACI) system for Kiln Q3. The River Plant site is a plant that consists of cement grinding and finishing operations only.

The purpose of this submittal is to request authorization to install and operate two portable compressor engines and an emergency fire water pump. The two diesel-fired portable compressor engines will be moved among each facility depending on the need at either location. The emergency fire water pump will be located at the Apple Valley site. This Authority to Construct Permit Application includes documentation as requested by the Mojave Desert Air Quality Management District (MDAQMD).

The addition of these new emissions sources requires the use of Emission Reduction Credits (ERCs) and is considered a Significant Title V Modification. A Title V - Permit Amendment/Modification Form (Form 1202-N) was submitted to MDAQMD under a separate cover letter.

San Bernardino County is currently classified as nonattainment for ozone, particulate matter with an aerodynamic diameter less than 10 microns (PM_{10}), and particulate matter with an aerodynamic diameter less than 2.5 microns ($PM_{2.5}$). Victorville is a minor source under the Prevention of Significant Deterioration (PSD) program and a major source under the Federal Operating Permits program (Title V) program.

2.0 EQUIPMENT AND SITE PROCESS INFORMATION

2.1 Equipment Description and Operating Schedule

Each portable compressor engine (COMP1 and COMP2) is a 250 horsepower (hp) John Deere, model number 6068, and are used throughout the site as an extra power source for operations. COMP1 and COMP2 are prime, portable engines and each engine is expected to operate no more than 480 hours per year or 40 hours per month. These engines will operate 52 weeks out of the year depending on the site's operational needs.

The emergency fire pump engine (ENG-EGEN) is a 422 hp John Deere, model number 6090HFC47A, and provides water to the emergency fire water system in case of a fire at the facility. ENG-EGEN is an emergency, standby engine. This engine is expected to operate less than 50 hours per year and one week out of the year for testing purposes.

2.2 Process Description

Each portable compressor engine, COMP1 and COMP2, will be fueled with diesel fuel and they will be moved to various locations at each site and provide additional power to different operation equipment depending on the operational needs of the facility. COMP1 and COMP2 will emit nitrogen oxides (NO_x), carbon monoxide (CO), volatile organic compounds (VOC), PM_{2.5}, PM₁₀, sulfur dioxide (SO₂), formaldehyde, benzene, and other hazardous air pollutants (HAPs). Total emissions from both COMP1 and COMP2 are expected to be less than 0.90 tons per year (tpy) or 0.45 tpy each.

Diesel fuel is routed to the emergency fire pump engine, ENG-EGEN, which drives the pump that provides water to the emergency fire sprinkler system. Emissions will be emitted from the engine. The emergency fire pump engine will emit NO_x, CO, VOC, PM_{2.5}, PM₁₀, SO₂, formaldehyde, benzene, and other HAPs. Total emissions from ENG-EGEN are expected to be less than 0.20 tpy.

2.3 Process Weight and Fuels Burned

Each portable compressor engine has a fuel consumption rate of 1,498,000 British thermal units per hour (Btu/hr). COMP1 and COMP2 are diesel-fired engines and burn 10.7 gallons of fuel per hour.

The emergency fire pump engine has a fuel consumption rate of 2,380,000 Btu/hr. ENG-EGEN is a diesel-fired engine and burns 17 gallons of fuel per hour.

2.4 Best Available Control Technology (BACT)

Per Rule 1303(A) BACT is required for any new Permit Unit which emits, or has the Potential to Emit, 25 pounds per day or more of any Nonattainment Air Pollutant. Per the attached calculations in Appendix A, ENG-EGEN only has the potential to exceed 25 lbs per day of NO_x if it is run for more than 11 hours in a given day. This situation should not occur unless there is an emergency. Thus, CEMEX proposes that current proposed emission rates and use of this engine as an emergency engine meets BACT, as applicable.

3.0 EMISSIONS DATA

3.1 Emission Sources

This section provides the calculation methodology used to estimate emissions from the proposed project. Hourly emissions were calculated using an emission factor either provided by the manufacturer or obtained from the EPA's AP-42 Chapter 3 Guidance. Annual emissions were calculated based on the expected annual hours of operation for each of the engines. Detailed emission calculations are included in Appendix A.

3.2 Offsets Evaluation

The site-wide emissions, including the potential emissions from the two portable compressor engines and the emergency fire pump engine, are above the offset threshold amounts as per Rule 1303(B); therefore, offsets are required for this project for increases associated with non-attainment pollutants and their precursors as listed in Rule 1303(B). CEMEX is a VOC major source; therefore, all new VOC emissions must be offset. The number of offsets needed for the applicable pollutant emissions produced by the three engines was calculated based on the potential tons per year of each pollutant. Detailed calculations are included in Appendix A and summarized below.

Pound per Year Estimated Project Emissions for Applicable Pollutants

EPN	NO _x	VOC	PM ₁₀	SO _x
ENG-EGEN	122	4	5	1
COMP 1	79	38	4	1
COMP 2	79	38	4	1
Total	280	79	13	3
Total ERCs Required (1.3:1)	364	102	17	3
Total ERCs for VOC Emissions (2:1)	568	N/A	N/A	N/A

ERCs were purchased from Sierra Power Corporation and transferred to CEMEX to offset the applicable annual pollutant emissions produced by the additional engines. The ERCs were transferred from San Joaquin Valley Air Pollution Control District (SJVAPCD) to MDAQMD. A copy of the ERC transfer package is included in Appendix C. The following ERCs were transferred to CEMEX from Sierra Power Corporation:

- 23 pounds PM₁₀;
- 878 pounds NO_x; and;
- 4 pounds SO_x.

Note that no VOC ERCs were purchased from Sierra Power Corporation. CEMEX will use NO_x ERCs to offset the new VOC emissions. NO_x, PM₁₀, and SO_x ERCs will be applied at an offset ratio of 1.3 to 1.0 for project annual emissions as required by Rule 1305(C). An additional 2:1 offset ratio will be applied to

the NO_x ERCs to account for the VOC project annual emissions. Also note that purchased ERCs exceed the calculated annual project emissions.

4.0 SITE LOCATION

Apple Valley is in San Bernardino County, approximately 11 miles northeast of Bell Mountain, California.

Address: 25220 Black Mountain Quarry Road, Apple Valley, California 92307

4.1 Receptors

Sycamore Rocks Elementary School is the nearest school to the Apple Valley site and is approximately 29,637 feet away. The closest business is approximately 20,660 feet away and closest residence is approximately 18,500 feet away (see attached area map).

4.2 Scaled Area Map and Equipment Location Map

A scaled area map that shows the location of the Apple Valley site and the nearest receptors is included in this section as Figure 1. An equipment location map that shows the approximate location of the emergency fire pump engine is included in this section as Figure 2. The two portable compressor engines will move throughout the Apple Valley and Victorville facilities. In general, one of the compressors will be located at the Apple Valley site and the other one will be located at the Victorville site.

FIGURE 1 AREA MAP

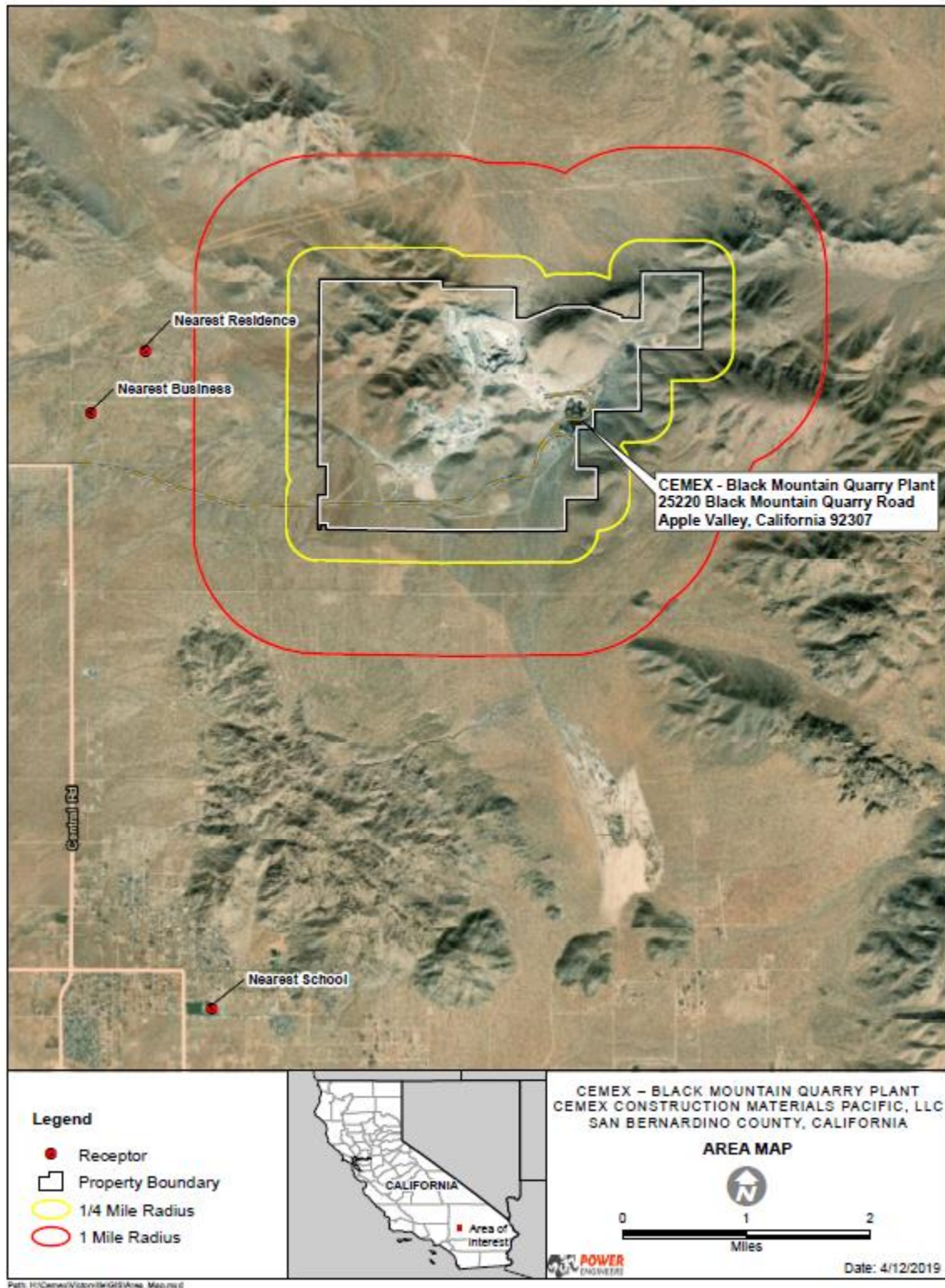


FIGURE 2 EQUIPMENT LOCATION MAP



APPENDIX A EMISSION CALCULATIONS

CEMEX - Black Mountain Quarry and River Plant New Equipment

Prepared by: Samuel Oktay, PE

Permit Number	CO Lbs/Yr	SOX Lbs/Yr	NOx Lbs/Yr	VOC Lbs/Yr	PM10 Lbs/Yr	TOXICS Lbs/Yr
E013353	31	0.17	121.53	3.4723	4.86119	4.8612
B013522	690	0.98	78.91	37.4829	3.94557	3.9456
B013523	690	0.98	78.91	37.4829	3.94557	3.9456
Total Lbs/Yr	1412.20	2.14	279.35	78.44	12.75	12.75
ERC's Required (Apply 1.3 to 1 Ratio for Criteria Pollutants)	1835.86	2.78	363.16	101.97	16.58	NA
NOX for VOCs at an additional 2:1 ratio	NA	NA	203.94	203.94	NA	NA
Total NOX Required			567.10			
SJVAPCD PM10 ERCs from Certificate No. 5-4847-4	NA	NA	NA	NA	23	NA
SJVAPCD SOx ERCs from Certificate No. 5-4585-5	NA	4	NA	NA	NA	NA
878 pounds of SJVAPCD NOx ERCs, or 0.439 tons of MDAQMD NOx ERCs from Certificate No. 5-4990-2	NA	NA	878	NA	NA	NA
Balance Remaining	NA	1.22	310.90	Included in NOx	6.42	NA

CEMEX - Black Mountain Quarry Plant (Apple Valley)

Application No/Permit No	MD100002306	Units	1000 GAL/HR	1000 GAL/YR
Permit No	E013353			
Equipment Certified Tier III	John Deere			
Make				
Model	6090HFC47A			
EPA Family	D10X105.0114			
CARB EO	NA			
Fuel rate	17.00	gal/hr	0.017	0.85
Engine Kw	315	KW		
Engine bhp	422	bhp		
Daily Operation	1	hr/day		
Annual Operation	50	hrs/yr		

Prepared by: Samuel Oktay, PE

<https://www.deere.com/en/generator-drive-engines/stage-II-a/powertech-e-9-01-hp84/>

POLLUTANT	CAS #	Emission Factor	Lbs/1000-Gals	PTE (lbs/Hr)	PTE Daily Emissions (lbs/day)	PTE Annual Emissions (lbs/year)	PTE Emissions (tons/year)	Emission Factor g/bhp-hr (1Kw= 1.341 bhp)
CRITERIA								
CO	42101	0.9000 g/Kw-hr	36.7653	0.6250	0.62501	31	0.0156	0.7
SO _x	42401	0.0050 g/Kw-hr	0.2026	0.0034	0.00344	0.172	0.0001	0.004
NOX	42603	3.5000 g/Kw-hr	142.9763	2.4306	2.43060	122	0.0608	2.6
NMHC (VOC)	43104	0.1000 g/Kw-hr	4.0850	0.0694	0.06945	3	0.0017	0.1
MOX + NMHC (VOC)		3.7000 g/Kw-hr	151.1463	2.5695	2.56949	128	0.0642	2.7
PM ₁₀	85101	0.1400 g/Kw-hr	5.7191	0.0972	0.09722	5	0.0024	0.11
PM2.5	88101	0.1400 g/Kw-hr	5.7191	0.0972	0.09722	5	0.0024	0.11
TOXICS								
Diesel Particulate	9901		5.7191	9.72E-02	9.72E-02	4.86E+00		

PTE Daily Emissions (lbs/day) using Lbs/1000_Gals per Day
0.625011
0.003444
2.430596
0.069446
2.569488
0.097224
0.097224

NOTES:
Emission Factors are from Manufacturers Spec Sheet except SOx, which is calculated below.

*Data used to calculate SOx Emission Factors			
Fuel rate	17	gal/hr	
Density of Ultra-low Sulfur Diesel No. 2	6.76	lbs/gal	
Sulfur fraction of Ultra-low Sulfur Diesel No.2	0.000015	gS	0.0015% Rule M 431 Requires 0.05 % Max
Molecular Weights			
Sulfur	32.06	g/mol	
Sulfur dioxide	64.06	g/mol	
	1.998128509	gSO2/gS	
Horsepower of Engine	315	Kw	
	0.003174603	1/Kw	
Conversions	453.6	g/lbs	
Equation used	17 gal/hr X 6.76 lbs/gal X 453.515 g/lb X 0.0015gS/100g (sulfur) X 1/315Kw X 64.06 gSO2/32.06gS =		
SOx Emissions =	0.0050	gSO2/Kw-hr	

1.341 HP = 1 Kw

CEMEX - Black Mountain Quarry and River Plant Portable Air Compressor

Prepared by: Samuel Oktay, PE

Application No/Permit No		Units	1000 GAL/HR	1000 GAL/YR
Permit No.	8013522			
Equipment Tier N Final				
Make	John Deere			
Model	6068			
EPA Family				
CARB EO				
Fuel rate	10.10 gal/hr		0.0101	88.476
Engine Kw	186.43			
Engine bhp	250			
Daily Operation	24 hr/day			
Annual Operation	480 hrs/yr			

POLLUTANT	CAS #	Emission Factor	Lbs/1000-Gals	PTE (lbs/Hr)	PTE Daily Emissions (lbs/day)	PTE Annual Emissions (lbs/year)	PTE Emissions (tons/year)	Emission Factor g/bhp-hr (1Kw= 1.341 bhp)
CRITERIA								
CO	42101	3.50 g/kW-hr	7.8041	0.0788	34.5237	690	0.3452	2.610
SO _x	42401	0.0050 g/kW-hr	0.0111	0.0001	0.0491	1	0.0005	0.004
NO _x	42603	0.40 g/kW-hr	0.8919	0.0090	3.9456	79	0.0395	0.298
NMHC (VOC)	43104	0.1900 g/kW-hr	0.4237	0.0043	1.8741	37	0.0187	0.142
PM ₁₀	85101	0.0200 g/kW-hr	0.0446	0.0005	0.1973	4	0.0020	0.015
PM2.5	88101	0.0200 g/kW-hr	0.0446	0.0005	0.1973	4	0.0020	0.015
TOXICS								
Diesel Particulate	9901		0.0446	4.50E-04	1.08E-02	3.95E+00		

PTE Daily Emissions (lbs/day) using Lbs/1000_Gals per Day
1.891710185
0.002691108
0.21619545
0.102692839
0.010809772
0.010809772

NOTES:
Emission Factors are from Off-Road Engine Standards for Tier IV Final

*Data used to calculate SOx Emission Factors			
Fuel rate	10.1 gal/hr		
Density of Ultra-low Sulfur Diesel No. 2	6.76 lbs/gal		
Sulfur fraction of Ultra-low Sulfur Diesel No.2	0.000015 gS	0.0015%	Rule M 431 Requires 0.05 % Max
Molecular Weights			
Sulfur	32.06 g/mol		
Sulfur dioxide	64.06 g/mol		
	1.998128509 gSO2/gS		
Horsepower of Engine	186.4280388 Kw		
	0.005364 1/Kw		
Conversions	453.6 g/lbs		
Equation used	10.1 gal/hr X 6.76 lbs/gal X 453.515 g/lb X 0.0015gS/100g (sulfur) X 1/186.43KW X 64.06 gSO2/32.06gS =		
SOx Emissions =	0.0050 gSO2/Kw-hr		

1.341 HP = 1 Kw

CEMEX - Black Mountain Quarry and River Plant Portable Air Compressor

Prepared by: Samuel Oktay, PE

Application No/Permit No	Units	1000 GAL/HR	1000 GAL/YR
Permit No.	B013523		
Equipment Tier / Final			
Make	John Deere		
Model	6068		
EPA Family			
CARB EO			
Fuel rate	10.10 gal/hr	0.0101	88.476
Engine Kw	186.43		
Engine bhp	250		
Daily Operation	24 hr/day		
Annual Operation	480 hrs/yr		

POLLUTANT	CAS #	Emission Factor	Lbs/1000-Gals	PTE (lbs/Hr)	PTE Daily Emissions (lbs/day)	PTE Annual Emissions (lbs/year)	PTE Emissions (tons/year)	Emission Factor g/bhp-hr (1Kw= 1.341 bhp)
CRITERIA								
CO	42101	3.50 g/kW-hr	7.8041	0.0788	34.5237	690	0.3452	2.610
SO _x	42401	0.0050 g/kW-hr	0.0111	0.0001	0.0491	1	0.0005	0.004
NO _x	42603	0.40 g/kW-hr	0.8919	0.0090	3.9456	79	0.0395	0.298
NMHC (VOC)	43104	0.1900 g/kW-hr	0.4237	0.0043	1.8741	37	0.0187	0.142
PM ₁₀	85101	0.0200 g/kW-hr	0.0446	0.0005	0.1973	4	0.0020	0.015
PM2.5	88101	0.0200 g/kW-hr	0.0446	0.0005	0.1973	4	0.0020	0.015
TOXICS								
Diesel Particulate	9901		0.0446	4.50E-04	1.08E-01	3.95E+00		

PTE Daily Emissions (lbs/day) using Lbs/1000_Gals per Day
1.891710185
0.002691108
0.21619543
0.102692839
0.010809772
0.010809772

NOTES:

Emission Factors are from Off-Road Engine Standards for Tier IV Final

*Data used to calculate SOx Emission Factors			
Fuel rate	10.1 gal/hr		
Density of Ultra-low Sulfur Diesel No. 2	6.76 lbs/gal		
Sulfur fraction of Ultra-low Sulfur Diesel No.2	0.000015 gS	0.0015%	Rule M 431 Requires 0.05 % Max
Molecular Weights			
Sulfur	32.06 g/mol		
Sulfur dioxide	64.06 g/mol		
	1.998128509 gSO ₂ /gS		
Horsepower of Engine	186.4280388 Kw		
	0.005364 1/Kw		
Conversions	453.6 g/lbs		
Equation used	10.1 gal/hr X 6.76 lbs/gal X 453.515 g/lb X 0.0015gS/100g (sulfur) X 1/186.43Kw X 64.06 gSO ₂ /32.06gS =		
SOx Emissions =	0.0050 gSO ₂ /Kw-hr		

1.341 HP = 1 Kw

APPENDIX B EQUIPMENT SPECIFICATIONS

APPENDIX B

Rating Specific Emissions Data - John Deere Power Systems



JOHN DEERE

Nameplate Rating Information

Clarke Model	JW6H-UFADJ0
Power Rating (BHP / kW)	350 / 261
Certified Speed (RPM)	1760

Rating Data

Rating	6090HFC47A	
Certified Power (kW)	315	
Rated Speed	1760	
Vehicle Model Number	Clarke Fire Pump	
Units	g/kW-hr	g/hp-hr
NOx	3.5	2.6
HC	0.1	0.1
NOx + HC	3.7	2.7
Pm	0.14	0.11
CO	0.9	0.7

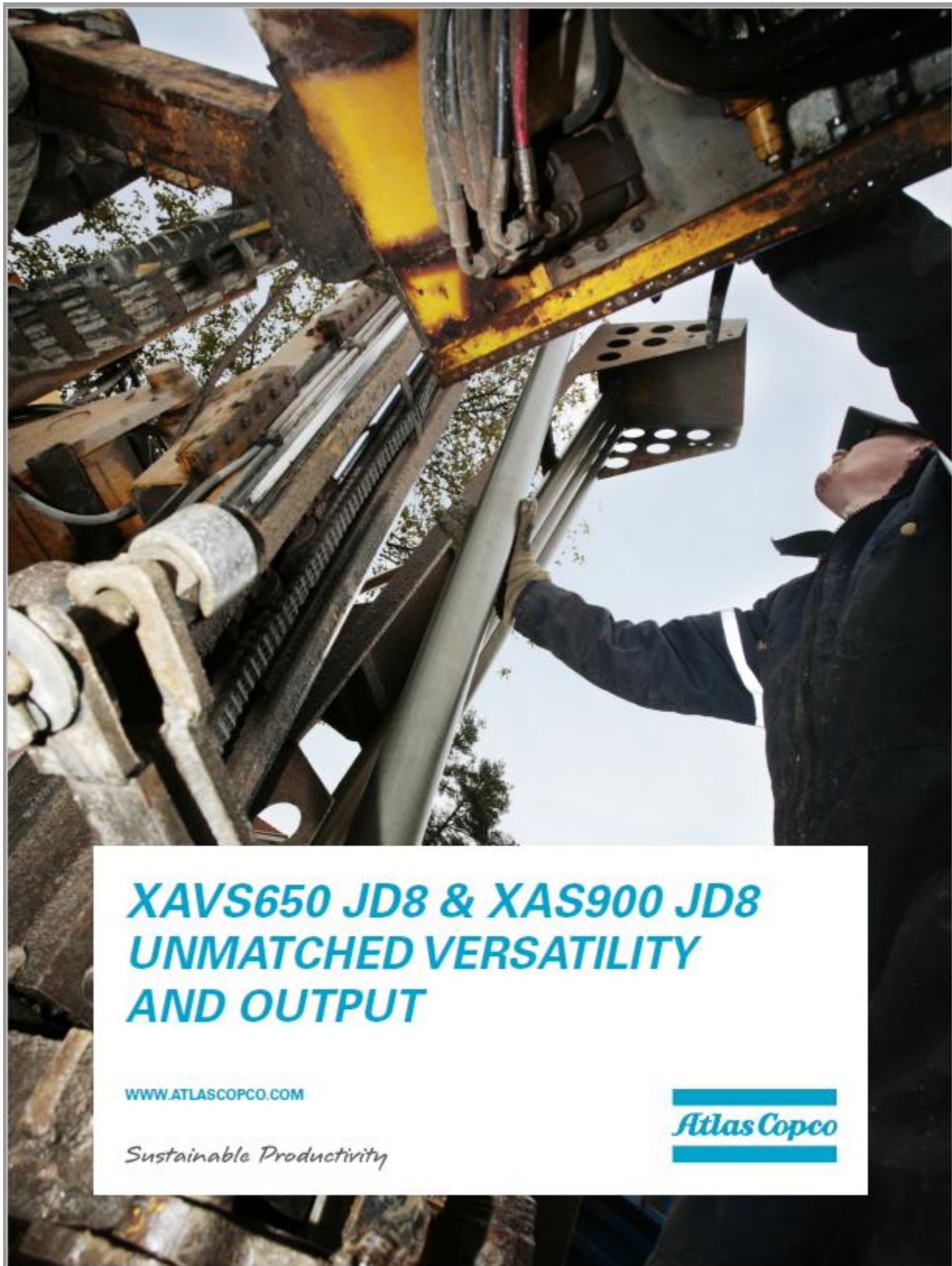
Certificate Data

Engine Model Year	2013
EPA Family Name	DJDXL09.0114
EPA JD Name	450HAB
EPA Certificate Number	DJDXL09.0114-005
CARB Executive Order	Not Applicable
Parent of Family	6090HFG84A
Units	g/kW-hr
NOx	3.8
HC	0.1
NOx + HC	3.9
Pm	0.13
CO	0.9

* The emission data listed is measured from a laboratory test engine according to the test procedures of 40 CFR 89 or 40 CFR 1039, as applicable. The test engine is intended to represent nominal production hardware, and we do not guarantee that every production engine will have identical test results. The family parent data represents multiple ratings and this data may have been collected at a different engine speed and load. Emission results may vary due to engine manufacturing tolerances, engine operating conditions, fuels used, or other conditions beyond our control.

This information is property of Deere & Company. It is provided solely for the purpose of obtaining certification or permits of Deere powered equipment. Unauthorized distribution of this information is prohibited.

JDPS 2/28/2013



XAVS650 JD8 & XAS900 JD8
UNMATCHED VERSATILITY
AND OUTPUT

WWW.ATLASCOPCO.COM

Sustainable Productivity

Atlas Copco

ATLAS COPCO XAVS 650 JD8 & XAS 900 JD8 COMPACT, VERSATILE AND POWERFUL

Need Air? The Atlas Copco XAVS 650 JD8 & XAS 900 JD8 air compressor are truly the most versatile in their class with variable flow and pressure setting as standard features. Increasing the versatility creates a machine that is ready for a wider range of applications, in turn increasing your return on investment.

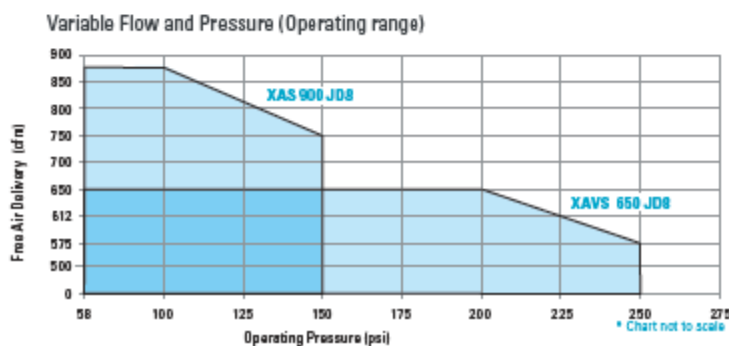
VERSATILITY

USER-FRIENDLY CONTROLS

The Xc2003 controller has a full color LCD screen that displays all the necessary information to get the job done quickly, efficiently and safely. The regulation system utilizes a single pneumatic regulator which the operator can easily dial in the desired pressure, and the controller will automatically adjust the output to deliver the flow while still maintaining industry leading fuel efficiency.

VARIABLE VERSATILITY

The variable pressure and flow on these two models make them a fit for a wide range of applications. The XAVS650 JD8 has a higher operating pressure allowing for up to 250psi. The combined features of the higher pressure and small foot print will open drilling of smaller diameter holes in applications such as geothermal and directional drilling.



EFFICIENT AIR

The John Deere 6068 Tier 4 Final engine is mounted with an Atlas Copco C146 air element. The single stage C146 element is one of the most efficient screw compressor designs on the market today. This translates to less energy loss in the system and equates to lower fuel consumption per CFM.

SIMPLIFIED MAINTENANCE

Servicing through large oversized gullwing doors provides quick access to components, including the air end, engine maintenance and electrical components. Drains for water and oil are easy to reach and are plumbed outside of the containment basin for draining. With 500 hour service intervals on the engine and 1000 hour on the compressor this machine will be the workhorse of your fleet.



PORTABLE FULL FEATURE (PFF)

Atlas Copco's PFF system ensures cool, clean and dry air. The PFF system is plumbed through a secondary outlet which provides the ability for isolation of the hoses and hardware. PFF comes standard with a three way valve that the operator can select various air quality levels and optimal cold weather configuration.



COOL - High efficiency aftercooler reduces compressed air temperature.



DRY - Compact WSD condensate removal in combination with the aftercooler removes liquid water from the compressed air.



CLEAN - Dedicated Atlas Copco DD+PD filters remove oil aerosol content to 0.01mg/m³ and particles down to 0.01 micron at the industry's lowest pressure drop.



HEAVY DUTY ENCLOSURE

The compressors are on built a newly designed compact single axle platform with heavy gauge, powder coated galvanealed steel. The base frame is built with a rigid structure and incorporates 100% fluid containment as a standard feature on all machines. The superior fit and finish on the enclosure provides sound attenuation, as well as protection from the elements.

Technical data

Model		XAWS 650 JDe		XAWS 900 JDe	
Actual free air delivery (Standard air)	CFM*	575	600	750	867
Actual free air delivery (Aftercooled air)**	CFM*	545	620	720	837
Working pressure	psi (Bar)	230	200	150	100
Working pressure range	psi (Bar)	58 - 275		58 - 175	
Discharge outlet quantity	#	3 standard, 4 w/ aftercooler			
Discharge outlet size	inches	1 x 1 1/2" & 2 x 3/4"			
Regulation system		Pneumatic			
Engine					
Model	John Deere	6068			
Displacement	L	6.8			
Cylinders	#	6			
Tier	US EPA	Tier 4 Final			
Exhaust after-treatment		DOC / DPF / SCR			
HP		250			
Rated speed (High)	RPM	2100			
Rated speed (Low)	RPM	1300			
Fuel tank capacity	Gal (L)	88 (333)			
Fuel consumption @ 100% load	Gal/hr (L/hr)	10.1(38.2)	10.5(39.7)	10.7(40.5)	10.7(40.5)
Fuel autonomy @ 100% load	Hours	8.7	8.4	8.2	8.2
DEF tank capacity	Gal (L)	11.3 (43)			
DEF autonomy @ 100% load***	Hours	>24			
Unit dimensions - LxWxH					
Single axle trailer	Inches	203 x 80 x 86			
Weight (Wet)	lbs (kg)	7,980 (3,620)			
Support mounted	Inches	145.5 x 66.5 x 78			
Weight (Wet)	lbs (kg)	TBA			

*Measured according to ISO 1217, 2300 series 3. Dependent on ambient conditions and temperature.

**Aftercooler is an optional feature.

***Based on estimate of 3.5% of fuel consumption. Actual amount will vary based on environmental conditions, DEF age and quality.

Photos and illustrations contained herein might depict products with optional and/or extra components which are not included with the standard version of the product and, therefore, are not included in a purchase of such product unless the customer specifically purchases such optional/extra components. We reserve the right to change the specifications and design of products described in this literature without notice. Not all products are available in all markets.



Danger: Compressed air should never be supplied as breathing air unless air is properly purified for breathing. Atlas Copco assumes no responsibility or liability related to the purchaser's/user's breathing air system.



STANDARD FEATURES

- Compact, sound attenuated, corrosion resistant enclosure
- Variable operating pressure and flow settings
- 100% fluid containment and Tier 4 Final emissions
- FuelXpert™

BENEFITS

- Extremely durable, portable design to be used for everything from oil patch applications to bridge remediation.
- The versatility of the Xc2003 controller gives you the flexibility to tune your machine to a wider range of applications. The machine will match the air flow with the desired operating pressure to maximize output and keep the engine as fuel efficient as possible. In turn it will increase your utilization rate and ROI as it is adaptable to many more applications than a standard machine.
- Designed with environment protection in mind for use in sensitive area
- Best in class fuel consumption, leading to lower operational costs

OPTIONS

- Refinery equipment
- Support mounted base frame
- Portable Full Feature (filtered air)
- Electric brake undercarriage
- Cold weather package

ISO STANDARDS

Atlas Copco's fully implemented Quality Management and Environmental Management systems in the design and manufacturing of these units fulfill the requirements of ISO 9001 and ISO 14001. The range has also been tested according to ISO 1217.

TBA - December 2016 - Subject to modification without prior notice. Copyright 2015, Atlas Copco Compressors LLC.

APPENDIX C EMISSION REDUCTION CREDIT TRANSFER PACKAGE



AQC Environmental Brokerage Services
5881 Engineer Drive
Huntington Beach, CA 92649
P: (714) 397-5508
www.aqc-inc.com

March 6, 2019

Leonard Scandura
Air Pollution Control Officer
San Joaquin Valley Air Pollution Control District
34946 Flyover Court
Bakersfield, CA 93308

Dear Mr. Scandura:

Cemex Construction Materials Pacific, LLC ("Cemex") is requesting the approval of an inter-district transfer of Emission Reduction Credits ("ERCs") from San Joaquin Valley Air Pollution Control District ("SJVAPCD") to Mojave Desert Air Quality Management District ("MDAQMD"). The following ERCs will be transferred to Cemex from Sierra Power Corporation:

1. 23 pounds of SJVAPCD PM10 ERCs, or 0.0115 tons of SJVAPCD PM10 ERCs from Certificate No. S-4847-4
2. 4 pounds of SJVAPCD SOx ERCs, or 0.002 tons of SJVAPCD SOx ERCs from Certificate No. S-4585-5
3. 878 pounds of SJVAPCD NOx ERCs, or 0.439 tons of MDAQMD NOx ERCs from Certificate No. S-4990-2

We ask for your consideration of this transfer upon analysis of the attached items in this transfer package. Upon your approval of the exit of credits from San Joaquin Valley Air Pollution Control District, we will contact Mojave Desert Air Quality Management District and request their approval of the entrance of such credits. Please notify us once you have approved of this transfer, and any next steps that need to be taken.

If both air districts approve of the transfer, please forward newly issued certificates to:

Cemex Inc
Attention: Alejandra Silva
16888 N. "E" Street
Victorville, CA 92394
alejandrav.silva@cemex.com

Please forward the altered certificates to the following address:

Sierra Power Corporation
Attention: Kent Duyen
9000 Road 234

Terra Bella, CA 83270
Sfp@sierraforest.net

Attached in this transmittal are the following items necessary to process the ERC Transfer:

- Purchase and Sale Agreement executed by both parties
- Letter from the Buyer authorizing the ERC transfer
- Transfer fee check in the amount of \$83.00
- Transfer of Ownership ERC Letter of Release (Transfer form) signed by Seller

Please send written confirmation of the ERC transfer from Sierra Power Corporation to Cemex Inc or email copies of the newly issued, original certificates to my attention at jferlita@aqc-inc.com.

Air Quality Consultants Inc.
Attention: Jackie Ferlita
5881 Engineer Drive
Huntington Beach, CA 92649

Thank you for your assistance in processing this ERC transfer request. Please call me at 714-397-5508 if you have any questions.

Sincerely,


Jackie Ferlita
President, Emissions Broker
Air Quality Consultants Inc.



Air Quality Consultants
5881 Engineer Drive
Huntington Beach, CA 92649
P: (714) 397-5508

Purchase and Sale of San Joaquin Valley Air Pollution Control District Emission Reduction Credits ("Agreement")

Buyer:	Cemex Inc. on behalf of Cemex Construction Materials Pacific, LLC	Address: 10100 Katy Fwy., Suite 300 Houston, TX 77043																									
Buyer Contact:	Ernesto Liboreiro	Contact Telephone Number: 713-722-1711 Email: ernesto.liboreiro@cemex.com																									
Seller:	Sierra Power Corporation	Address: 9000 Road 234 Terra Bella, CA 93270																									
Seller Contact:	Kent Duyzen	Contact Telephone Number: 559-535-4893 Email: sfp@sierraforest.net																									
Transaction Date:	February 14, 2019																										
Product & Quantity:	23 pounds of PM10 ERCs, or 0.0115 tons, spread evenly across quarters, derived from SJVAPCD ERC Certificate No. S-4847-4 878 pounds of NOx ERCs, or 0.439 tons, spread evenly across quarters, derived from SJVAPCD ERC Certificate No. S-4990-2 4 pounds of SOx ERCs, or 0.002 tons, spread evenly across quarters, derived from SJVAPCD ERC Certificate No. S-4585-5 To be distributed as detailed herein: <table><tr><th colspan="5">SJVAPCD Federal Certificate No.</th></tr><tr><th>Product</th><th>Quarter 1 (lbs.)</th><th>Quarter 2 (lbs.)</th><th>Quarter 3 (lbs.)</th><th>Quarter 4 (lbs.)</th></tr><tr><td>PM10</td><td>6</td><td>6</td><td>6</td><td>5</td></tr><tr><td>NOx</td><td>220</td><td>220</td><td>219</td><td>219</td></tr><tr><td>SOx</td><td>1</td><td>1</td><td>1</td><td>1</td></tr></table>		SJVAPCD Federal Certificate No.					Product	Quarter 1 (lbs.)	Quarter 2 (lbs.)	Quarter 3 (lbs.)	Quarter 4 (lbs.)	PM10	6	6	6	5	NOx	220	220	219	219	SOx	1	1	1	1
SJVAPCD Federal Certificate No.																											
Product	Quarter 1 (lbs.)	Quarter 2 (lbs.)	Quarter 3 (lbs.)	Quarter 4 (lbs.)																							
PM10	6	6	6	5																							
NOx	220	220	219	219																							
SOx	1	1	1	1																							
Purchase & Sale:	Seller shall sell to Buyer, and Buyer shall purchase from Seller 0.0115 tons of SJVAPCD PM10 ERCs at \$55,248.62 per ton, 0.439 tons of SJVAPCD NOx ERCs at \$55,248.62 per ton, and 0.0002 tons of SJVAPCD SOx ERCs at \$55,248.62 per ton; totaling \$25,000.00.																										
Contingencies of Approval:	Upon the following Contingencies of Approval being satisfied, Buyer will purchase the Product and Quantity of ERCs: <ul style="list-style-type: none">• Approval of ERC exit by the San Joaquin Valley APCD Air Pollution Control Officer• Approval of ERC entrance by the Mojave Desert AQMD Air Pollution Control Officer																										
Transfer and Payment Terms:	Upon Contingencies of Approval being satisfied, Buyer Agrees to buy, and Seller agrees to sell the Product and Quantity of ERCs. Broker will work with Buyer and Seller to submit all necessary transaction paperwork to complete the ERC transfer. Buyer agrees to pay SJVAPCD/MDAQMD ERC transfer fees. Within two (2) business days of receipt of transaction paperwork, Buyer will sign the Purchase and Sale Agreement (PSA) and send a PDF copy to Seller. Seller will countersign the PSA and send a PDF copy to Broker. Buyer will send one Letter of Intent to purchase on company letterhead (intended for SJVAPCD), and one Letter of Intent to purchase on company letterhead (intended for MDAQMD) to Broker at the following address:																										

AQC
Attn: Jackie Ferlita
5881 Engineer Drive
Huntington Beach, CA 92649

Seller will sign the ERC transfer form and send to Broker with original signature to the address listed above.

On receipt of Buyer's letters (from Buyer) and transfer form (from Seller), Broker will submit both letters, transfer form, fully executed PSA, transfer fees, and AQC's letter to SJVAPCD outlining the details and nature of the transfer to SJVAPCD.

Buyer agrees to submit Total price, Brokerage, and SCAQMD Transfer fee to Broker within thirty (30) business days from execution of Purchase and Sale Agreement.

Within five (5) business days of written notice from the SJVAPCD/MDAQMD of transfer of ERCs from Seller to Buyer, Broker will submit Purchase Price less Brokerage to Seller.

All funds paid shall be rendered in the form of immediately available United States dollars. Payment shall be made by wire transfer or in such other form as agreed to by the parties.

Buyer and Seller shall cooperate fully to obtain any and all required approvals and/or documents which may be required to retire ERCs in Buyer's name.

IN WITNESS WHEREOF, the Buyer and Seller hereto made and executed this Agreement for the Purchase and Sale of ERCs, signed by their duly authorized officers or individuals, as of the day and year first above written.

Buyer: Cemex Inc. on behalf of Cemex Construction Materials Pacific, LLC		Seller: Sierra Power Corporation	
Signature: 	Title: Chief Economist	Signature: 	Title: President
Printed Name: Ernesto S. Libocera	Date: Feb 25, 2019	Printed Name: Kent Duyser	Date: 2/25/19



February 14, 2019

Mr. Leonard Scandura
Air Pollution Control Officer
San Joaquin Valley Air Pollution Control District
34946 Flyover Court
Bakersfield, CA 93308

Re: Transfer of ERCs from San Joaquin Valley Air Pollution Control District to Mojave Desert Air Quality Management District

Dear Mr. Scandura:

Cemex Construction Materials Pacific, LLC ("Cemex") requests the approval of an inter-district transfer of Emission Reduction Credits ("ERCs") from San Joaquin Valley Air Pollution Control District ("SJVAPCD") to Mojave Desert Air Quality Management District ("MDAQMD") pursuant to California Health and Safety Code Section 40709.6. Section 40709.6 requires an inter-district transfer to be approved by a resolution adopted by the Governing Board or Air Pollution Control Officer in each District. Cemex and Sierra Power Corporation ("SPC") are requesting the transfer of title to certain ERCs, which are defined in and governed by SJVAPCD, to Cemex to be used in the MDAQMD.

Cemex is kindly requesting the approval of this transfer by the SJVAPCD and MDAQMD.

ERCs Requested for Transfer

Cemex has contracted for the purchase of 0.0115 tons of Particulate Matter ("PM10"), 0.439 tons of Nitrous Oxides ("NOx"), 0.002 tons of Sulfur Oxides ("SOx") ERCs from Sierra Power Corporation's SJVAPCD ERC Certificates No. S-4847-4, S-4990-2, and S-4585-5, respectively. Cemex is requesting SJVAPCD approve the export of the aforementioned quantities from the ERC certificate detailed below:

Product	Quarter 1 (lbs)	Quarter 2 (lbs)	Quarter 3 (lbs)	Quarter 4 (lbs)	Total Tons
PM10	6	6	6	5	0.0115
NOx	220	220	219	219	0.439
SOx	1	1	1	1	0.002

Cemex has an agreement to purchase the ERCs needed for the project from Sierra Power Corporation, which were a result of the shutdown of the biomass fired cogeneration plant located in Terra Bella, California.

Therefore, Cemex is requesting the approval of an inter-district transfer of ERCs from SJVAPCD to MDAQMD, pursuant to California Health and Safety Code, Section 40709.6.

CEMEX, INC. - United States Operations
10100 Katy Freeway, Suite 300 Houston, Texas 77043 USA Phone (713) 650 6200 cemexusa.com



California Health and Safety Code

Listed below are the applicable sections of the Health and Safety Code and how each requirement has been addressed:

California Health and Safety Code 40709.6 allows for the offset of emissions at a stationary source located in one air district with emissions reductions credited to a stationary source in another air district, outside of the air basin if the following conditions are met; the stationary source to which the emissions reductions are credited is located in an upwind district that is classified as being a worse non-attainment status than the downwind district, and the stationary source at which there are emissions increase to be offset is located in a downwind district that is overwhelmingly impacted by emissions transported from the upwind district. The use of SPC's ERCs at Cemex's Victorville facility satisfies both requirements.

Furthermore, the California Health and Safety Code 40709.6 stipulates that inter-district ERC transfers must be approved by a resolution adopted by the governing boards of both air districts or by the air pollution control officers, if such authority is delegated by the boards. The evaluation of the transaction includes factors such as the impact of the offset on air quality, public health, and regional economy.

MDAQMD is currently waiting for SJVAPCD to approve the transfer of ERCs which will be surrendered to MDAQMD for the issuance of the permit for the aforementioned project. MDAQMD will not grant the requested authorization to construct unless it determines that the project complies with relevant federal and state rules, regulations, and air quality standards.

The transfer of the subject ERCs will result in a net air quality benefit for the San Joaquin Valley as the transfer of the aforementioned ERCs will prevent their use to offset emissions in the future, while the offset ratios required by MDAQMD New Source Review regulations will ensure that a greater amount of ERCs will be used than pollutants emitted. Pursuant to MDAQMD regulations, Cemex will submit the subject ERCs at a ratio of at least 1.3 to 1, fully offsetting the potential emissions increase from its project.

Public Health

The use of SJVAPCD ERCs for the project are expected to have a net benefit to air quality, and public health. The quantity of ERCs used will exceed the project's maximum potential emissions, the ERC transfer may result in a future public health benefit due to the 1.3 to 1 offset ratio in MDAQMD.

Regional Economy

These ERCs would allow continued operation of a successful business entity in the Mojave Desert and an employer of many residents of this region. The sustained jobs, capital investment, and ongoing operations associated with the project will have a positive impact on the regional economy while fully complying with very stringent air quality regulatory requirements.

Based on the foregoing reasons, we request that SJVAPCD and MDAQMD's Air Pollution Control Officers evaluate and approve the transfer of Sierra Power Corporation's ERCs between SJVAPCD and MDAQMD.

Thank you for your time and consideration with this matter. Please contact me at (713) 722-1711 if you have any questions or need additional information.

CEMEX, INC. - United States Operations
10100 Katy Freeway, Suite 300 Houston, Texas 77043 USA Phone (713) 650 6200 cemexusa.com



Sincerely,

A handwritten signature in black ink, appearing to read "Ernesto Liboreiro", with a long horizontal flourish extending to the right.

Ernesto Liboreiro
Chief Economist
CEMEX

PROJECT NO.:	FACILITY ID.:
--------------	---------------

TRANSFER OF OWNERSHIP ERC LETTER OF RELEASE

Sierra Power Corporation, as current holder of record of
(Selling Company Name)
Emission Reduction Credit (ERC) banking certificates (as listed below) issued
by the San Joaquin Valley Air Pollution Control District (SJVAPCD), hereby
releases all rights of ownership, in whole or in part, as described in the
accompanying application, of the below listed ERCs to:

Cemex Inc on behalf of Cemex Construction Materials Pacific, LLC
(Acquiring Company Name)
as of February 14, 2019.
(Date of Sale)

CERTIFICATE NUMBER(S)

S-4990-2 _____
S-4847-4 _____
S-4585-5 _____

(Use Additional Sheets if Necessary)

Signed: Kent Duysen Date: 2/15/19
Name (Print): Kent Duysen Title: President
Company Name: Sierra Power Corporation

Acquiring Company Contact

Name:

Ernesto Liboreiro

Telephone:

713-650-6200

Address:

10100 Katy Fwy Suite 300

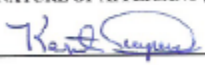
Houston, TX 77043

San Joaquin Valley Air Pollution Control District

Application for ERC Transfer of Ownership

☒ ERC TRANSFER OF OWNERSHIP
☐ ERC WITHDRAWAL

☐ NAME CHANGE ONLY (No change in ERC ownership has occurred)
☐ ERC TRANSFER OF OWNERSHIP & WITHDRAWAL

1. ERC TO BE ISSUED TO: Cemex Inc on behalf of Cemex Construction Materials Pacific, LLC		Facility ID: (if known)				
2. MAILING ADDRESS: Street/P.O. Box: 10100 Katy Fwy Suite 300 City: Houston State: TX Zip Code: 77043						
3. CURRENT OWNER: Sierra Power Corporation		Facility ID: S-834 (if known)				
4. MAILING ADDRESS: Street/P.O. Box: 9600 Road 234 City: Terra Bella State: CA Zip Code: 93270						
5. EXISTING ERC NO(S): S-4990-2; S-4847-4; S-4585-5						
6. If withdrawing ERCs, list Permit units being offset:						
7. REQUESTED ERCs (In Pounds Per Calendar Quarter except CO ₂ e):						
	VOC	NO _x	CO	PM10	SO _x	OTHER
1ST QUARTER		220		6	1	
2ND QUARTER		220		6	1	
3RD QUARTER		219		6	1	
4TH QUARTER		219		5	1	
CO ₂ e metric ton/yr						
8. FOR ERC T/O APPLICATIONS ONLY, LIST THE COST OF ERCs PROPOSED TO BE USED AS OFFSETS, (In Dollars Per Ton) :						
VOC: _____		CO: _____		SO _x : \$55,248.62		
NO _x : \$55,248.62/ton <small>(necessary)</small>		PM10: \$55,248.62		Other: _____ (Use additional sheets if necessary)		
9. SIGNATURE OF APPLICANT (FOR CURRENT OWNER): 				TYPE OR PRINT TITLE OF APPLICANT: President		
10. TYPE OR PRINT NAME OF APPLICANT: Kent Dusen				DATE: 2/15/19		TELEPHONE NO: 559-535-4893
11. COMPANY EMPLOYING APPLICANT: Sierra Power Corporation				FAX NO:		E-MAIL: sfp@sierraforest.net
FOR APCD USE ONLY:						
DATE STAMP			FILING FEE RECEIVED: \$ _____			
			DATE PAID:			

APPENDIX D MDAQMD FORMS

APPENDIX D

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

BRAD POIRIEZ, EXECUTIVE DIRECTOR
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 • Fax 760.245.2022
Email: engineering@mdaqmd.ca.gov
www.MDAQMD.ca.gov • @MDAQMD

Application for internal combustion engine (I.C.E.) only

Remit **\$288.00** with this document (\$164.00 for change of owner)



PLEASE TYPE OR PRINT

Section 1: Owner information

a. Permit to be issued to (company name): CEMEX Construction Material Pacific, LLC		b. Federal tax ID #: 72-0299500	
c. Mailing/billing address (for above company name) include city, state and zip code: 19806 North "E" Street, Victorville, CA 92394			
d. Facility or business license name (for equipment location): CEMEX Construction Material Pacific, LLC			
e. Facility Address — Location of equipment (if same as for company, enter "Same") 25239 Black Mountain Quarry Road, Apple Valley, CA 92307		Equip. coordinates (lat/long): 34.02417 / -117.100619	
f. Contact name: Alejandro V. Silva	Title: Environmental Manager	Email address: alejandro.v.silva@cemex.com	Phone: (760) 261-7540
General nature of business: Cement Manufacturing			Company NAICS: 307370
Type of Organization <input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency <input type="checkbox"/> Federal agency			

Section 2: Nature of application

Application is hereby made for the following equipment: Emergency Fire Pump - 2013 John Deere	
Application is for what type of permit: <input checked="" type="checkbox"/> New construction <input type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: N/A Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

Section 3: Equipment information

Engine function: <input type="checkbox"/> Prime <input type="checkbox"/> Emergency <input type="checkbox"/> Low-use (<80 hr/yr) <input type="checkbox"/> Portable <input checked="" type="checkbox"/> Stand-by (as defined in Rule 301[E](10)) <small>check one</small> <small>check all that apply</small>		
Engine manufacturer: John Deere	Engine model: 8000V1000A	Engine serial number: 70099311740
Engine year of manufacture: 2013	Date installed: April 2013	
Rating (BHP): 260	Speed (RPM): 1700	Number of cylinders: 6
Fuel type: <input checked="" type="checkbox"/> CARB diesel <input type="checkbox"/> Natural gas <input type="checkbox"/> Propane/LPG <input type="checkbox"/> Gasoline <input type="checkbox"/> Digester gas <input type="checkbox"/> Landfill gas <input type="checkbox"/> Other (specify): Alternative fuel/back-up fuel, if applicable (specify):		
Engine meter: <input checked="" type="checkbox"/> Hour meter <input type="checkbox"/> Dedicated fuel meter <input type="checkbox"/> None		
Cycle type: <input type="checkbox"/> two cycle <input checked="" type="checkbox"/> four cycle		Combustion type: <input checked="" type="checkbox"/> Rich burn <input type="checkbox"/> Lean burn
Check all that apply: <input type="checkbox"/> Naturally aspirated <input checked="" type="checkbox"/> Turbocharged <input type="checkbox"/> Aftercooled <input type="checkbox"/> Intercooled <input type="checkbox"/> Air-to-fuel ratio controller <input type="checkbox"/> Smoke puff limiter <input type="checkbox"/> Electronic control module <input type="checkbox"/> Direct fuel injection <input type="checkbox"/> Pre-combustion chamber <input type="checkbox"/> Piston scavenging <input type="checkbox"/> Other(s) (specify):		
Add-on emission control technology: <input type="checkbox"/> Yes <input type="checkbox"/> No (if applicable, attach manufacturer's specifications and CARB certification or source test results)		
If yes: Manufacturer:	Model:	Serial No.: CARB EOP:
Type: <input type="checkbox"/> SCR <input type="checkbox"/> Non-SCR <input type="checkbox"/> Particulate trap <input type="checkbox"/> EGR <input type="checkbox"/> Oxidation catalyst <input type="checkbox"/> Other (specify):		
Stack data Exhaust stack height from ground: feet Exhaust stack diameter: feet		
Stack is: <input type="checkbox"/> horizontal <input type="checkbox"/> vertical <input type="checkbox"/> weather cap Vent data: Exhaust temp. °F Maximum exhaust rate (ACFM):		

-For District use only-

Application number:	Invoice number:	Permit number:	Company/facility number:
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Section 4: Emissions data

Emission Factor Basis (attach any source specified): <small>Please, see attached documents</small>			
USEPA family name _____		CARB family name _____	
<input type="checkbox"/> Manufacturer	<input type="checkbox"/> Source test	<input type="checkbox"/> MDAQMD default	<input type="checkbox"/> USEPA AP-42
<input type="checkbox"/> Other (please specify): _____			
Emissions data:			
Pollutant	Pre-control max. emissions	Units	Post control max. emissions
NO _x	_____	_____	_____
NMHC	_____	_____	_____
CO	_____	_____	_____
PM ₁₀	_____	_____	_____
SO _x	_____	_____	_____
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.			

Section 5: Powered Item

This ICE is used to power: <input type="checkbox"/> Electrical generator <input type="checkbox"/> Compressor <input type="checkbox"/> Pump <input type="checkbox"/> Paint spray gun <input type="checkbox"/> Conveyor or drive			
<input type="checkbox"/> Fire pump <input type="checkbox"/> Other (specify): _____			
PERP registration (if applicable): _____			
Manufacturer: _____	Model: _____	Serial No.: _____	Type/size/rating: _____

Section 6: Operation information

Fuel Consumption: " _____ at max rated load <input checked="" type="checkbox"/> gal/hour <input type="checkbox"/> SCF/hour <input type="checkbox"/> MMBtu/hr	
Typical load: _____	
Facility annual operation by quarters (percent):	Expected operating hours of equipment
<input checked="" type="checkbox"/> Uniform OR _____ % Jan-Mar _____ % Apr-Jun	_____ Hrs/day _____ Days/wk _____ Wk/yr
_____ % Jul-Sep _____ % Oct-Dec	Total annual hours _____

Section 7: Receptor information

Distance (feet) and direction to the property line of closest: _____ residence _____ business _____ school _____			
Name of closest school (K-12) <u>Sycamore Ridge Elementary School</u>			
<i>If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&S §42301.6)</i>			

***Please note:** District staff may contact you for further information. Failure to provide additional information as requested in a timely manner may result in delays in the processing of this permit application.

Section 8: Certification

I hereby certify that all information contained herein is true and correct.			
Carlos Uruchurtu	Plant Manager		4/25/19
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: (760) 952-4864 or (760) 381-7660		Email: <u>carlosgabriel.uruchurtu@cemex.com</u>	

Application submission instructions:

- 1) Submit completed application to Engineering@mdaqmd.ca.gov
- 2) Pay the corresponding application fee of \$288 per permit for new or modified permit (or \$164 for change of owner) via check or credit card.

Payment by check:
Make check payable to **Mojave Desert AQMD**
Mail the check with a copy of this completed application to:
Mojave Desert AQMD
14306 Park Avenue
Victorville, CA 92392

Payment by credit card:
Pay online at <http://www.mdaqmd.ca.gov>
Click "Pay Fees"
Please note: a surcharge applies for all credit card payments.

- 3) If payment is made online via credit card, please email the receipt to Engineering@mdaqmd.ca.gov
- Should you have any additional questions, please, do not hesitate to contact the permitting division at 760-245-1661, or via email at **engineering@mdaqmd.ca.gov**



Government Payment Service

GovPayNet

7102 Lakeview Parkway West Drive
Indianapolis, IN 46268

24 Hour Customer Service #: 888-604-7888

Applications Payment Confirmation (Ref #: 25657343)

PLC: Mojave Desert Air Quality Management District
8094 14306 Park Avenue
 Victorville, California 92392
For: Applications

Date: 04/25/2019 18:32 EDTTRANSACTION INFORMATION**Contact's Name:** Alejandra Silva**Transaction Reference #:** 25657343**Doing Business As:** Cemex**Transaction Date/Time:** 04/25/2019 18:32 EDT**Company Name:** Cemex**Street Address:** 16888 E St
Victorville, Ca 92394**Telephone #:** (760)381-7638**Site Address:** 25220 Black Mountain Quarry Rd
Apple Valley, Ca 92307**Equipment Description:** Cemex -ice Emergency PumpBILLING INFORMATION**Name:** Kandyi Martinez**Address:** 16888 E St**City, State Zip:** Victorville, Ca 92394**Phone #:** (760)381-7638**Card #:** xxxx-xxxx-xxxx-3172PAYMENT INFORMATION**Approval #:** 043685**Payment Amount:** \$288.00**Service Fee:** \$11.25**Total Amount:** \$299.25**The service fee is not refundable.****ATTENTION CARDHOLDER**

If you have questions about the processing of your payment, please call GovPayNet at 888-604-7888.

Thank you for using GovPayNet

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

BRAD POIRIEZ, EXECUTIVE DIRECTOR
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 • Fax 760.245.2022
Email: engineering@mdaqmd.ca.gov
www.MDAQMD.ca.gov • @MDAQMD



General Application Form

Remit **\$288.00** with this document (\$164.00 for change of owner)

PLEASE TYPE OR PRINT

Section 1: Owner information

a. Permit to be issued to (company name): CEMEX Construction Material Pacific, LLC		b. Federal tax ID #: 72-0296500	
c. Mailing/billing address (for above company name) include city, state and zip code: 16888 North "E" Street, Victorville, CA 92394			
d. Facility or business license name (for equipment location): CEMEX Construction Material Pacific, LLC			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): 25220 Black Mountain Quarry Road, Apple Valley, CA 92307		Equip. coordinates (lat/long): 34.62417 (-117.100819)	
f. Contact name: Alejandra V. Silva	Title: Environmental Manager	Email address: alejandrav.silva@cemex.com	Phone: (760) 361-7649
General nature of business: Cement Manufacturing			Company NAICS: 327310
Type of Organization <input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency <input type="checkbox"/> Federal agency			

Section 2: Nature of application

Application is hereby made for the following equipment: Emergency Fire Pump - 2013 John Deere	
Application is for what type of permit: <input type="checkbox"/> New construction <input type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: N/A Current Permit Number
Do you claim Confidentiality of Data? <input type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

Section 3: Equipment information

Equipment description (give a brief description of the equipment and/or process): Diesel And Internal Combustion Engine - Emergency Fire Pump 2013 John Deere	
Power Output: 360 HP (261 kW)	
Engine Model Number: R6001PC10A	
Engine Serial Number: R030080117369	
EPA Family Number: 3.22JL09 0115	
Manufacturer: John Deere	Model: 6090HPC47A
Serial number: R030080117369	
Add-on air pollution control equipment? <input type="checkbox"/> Yes <input type="checkbox"/> No (Note: most APCE require a separate application)	
If yes: Manufacturer:	Model: Serial #: CARB EO#:
Type (specify):	
Stack data Exhaust stack height from ground: feet Exhaust stack diameter: feet	
Stack is: <input type="checkbox"/> horizontal <input type="checkbox"/> vertical <input type="checkbox"/> open <input type="checkbox"/> weather cap	
Vent data: Exhaust temp. °F Maximum exhaust rate (CFM):	

-For District use only-

Application number:	Invoice number:	Permit number:	Company/facility number:
---------------------	-----------------	----------------	--------------------------

Section 4: Emissions data

Emission Factor Basis (attach any source specified): <small>Please, see attached document.</small>				
<input type="checkbox"/> Manufacturer <input type="checkbox"/> Source test <input type="checkbox"/> MDAQMD default <input type="checkbox"/> USEPA AP-42				
<input type="checkbox"/> Other (please specify): _____				
Emissions data:				
Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO _x	_____	_____	_____	_____
NMHC	_____	_____	_____	_____
CO	_____	_____	_____	_____
PM ₁₀	_____	_____	_____	_____
SO _x	_____	_____	_____	_____
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.				

Section 5: Operation information


Fuel Consumption: <u>17</u> at max rated load <input type="checkbox"/> gal/hour <input type="checkbox"/> SCF/hour <input type="checkbox"/> MMBtu/hr	
Typical load: _____	
Facility annual operation by quarters (percent): <input checked="" type="checkbox"/> Uniform OR _____ % Jan-Mar _____ % Apr-Jun _____ % Jul-Sep _____ % Oct-Dec	Expected operating hours of equipment _____ Hrs/day _____ Days/wk <u>1</u> Wk/yr Total annual hours <u>30</u>

Section 6: Receptor information

Distance (feet) and direction to the property line of closest: <u>18,800 ft</u> residence <u>20,880 ft</u> business <u>28,837 ft</u> school
Name of closest school (K-12) <u>Sycamore Rocks Elementary School</u>
<i>If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&S §42301.6)</i>

***Please note:** District staff may contact you for further information. Failure to provide additional information as requested in a timely manner may result in delays in the processing of this permit application.

Section 7: Certification

I hereby certify that all information contained herein is true and correct.			
Carlos Unchurtu	Plant Manager		<u>4/25/19</u>
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: (760) 952-4864 or (760) 381-7693		Email: <u>carlosgabriel.unchurtu@cemex.com</u>	

Application submission instructions:

- 1) Submit completed application to Engineering@mdaqmd.ca.gov
- 2) Pay the corresponding application fee of \$288 per permit for new or modified permit (or \$164 for change of owner) via check or credit card.

Payment by check:

Make check payable to the Mojave Desert AQMD
Mail the check with a copy of this completed application to:

Mojave Desert AQMD
14306 Park Avenue
Victorville, CA 92392

Payment by credit card:

Pay online at <http://www.mdaqmd.ca.gov>

Click "Pay Fees"

Please note: a surcharge applies for all credit card payments.

- 3) If payment is made online via credit card, please email the receipt to Engineering@mdaqmd.ca.gov
- Should you have any additional questions, please, do not hesitate to contact the permitting division at 760-245-1661, or via email at engineering@mdaqmd.ca.gov



Government Payment Service

GovPayNet

7102 Lakeview Parkway West Drive
Indianapolis, IN 46268

24 Hour Customer Service #: 888-604-7888

Applications Payment Confirmation (Ref #: 25679208)

PLC: Mojave Desert Air Quality Management District **Date:** 04/29/2019 14:07 EDT
8094 14306 Park Avenue
 Victorville, California 92392
 For: Applications

TRANSACTION INFORMATION**Contact's Name:** Alejandra Silva**Transaction Reference #:** 25679208**Doing Business As:** Cemex**Transaction Date/Time:** 04/29/2019 14:07 EDT**Company Name:** Cemex**Street Address:** 16888 E St
Victorville, Ca 92394**Telephone #:** (760)381-7649**Site Address:** 25220 Black Mountain Quarry Rd
Apple Valley, Ca 92307**Equipment Description:** Cemex - General App / Emergency Fire Pump**BILLING INFORMATION****Name:** KandyI Martinez**Address:** 16888 E St**City, State Zip:** Victorville, Ca 92394**Phone #:** (760)381-7689**Card #:** xxxx-xxxx-xxxx-3172**PAYMENT INFORMATION****Approval #:** 032711**Payment Amount:** \$288.00**Service Fee:** \$11.25**Total Amount:** \$299.25**The service fee is not refundable.****ATTENTION CARDHOLDER**

If you have questions about the processing of your payment, please call GovPayNet at 888-604-7888.

Thank you for using GovPayNet

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT**BRAD POIRIEZ, EXECUTIVE DIRECTOR**

14306 Park Avenue, Victorville, CA 92392-2310

760.245.1661 • Fax 760.245.2022

Email: engineering@mdaqmd.ca.govwww.MDAQMD.ca.gov • @MDAQMD**Application for internal combustion engine (I.C.E.) only**Remit **\$288.00** with this document (\$164.00 for change of owner)

PLEASE TYPE OR PRINT

Section 1: Owner information

a. Permit to be issued to (company name): CEMEX Construction Material Pacific, LLC		b. Federal tax ID #: 72-0299500	
c. Mailing/billing address (for above company name) include city, state and zip code: 16888 North "E" Street, Victorville, CA 92394			
d. Facility or business license name (for equipment location): CEMEX Construction Material Pacific, LLC			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): 25220 Black Mountain Quarry Road, Apple Valley, CA 92307		Equip. coordinates (lat/long): 34.024177 -117.100819	
f. Contact name: Alejandra V. Silva	Title: Environmental Manager	Email address: alejandra.v.silva@cemex.com	Phone: (760) 381-7648
General nature of business: Cement Manufacturing			Company NAICS: 327310
Type of Organization <input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency <input type="checkbox"/> Federal agency			

Section 2: Nature of application

Application is hereby made for the following equipment: Portable Compressor - John Deere, Name-COMP1	
Application is for what type of permit: <input checked="" type="checkbox"/> New construction <input type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: N/A Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

Section 3: Equipment information

Engine function: <input checked="" type="checkbox"/> Prime <input type="checkbox"/> Emergency <input type="checkbox"/> Low-use (<80 hr/yr) <input checked="" type="checkbox"/> Portable <input type="checkbox"/> Stand-by (as defined in Rule 301(E)(10)) <small>check one check all that apply</small>		
Engine manufacturer: John Deere	Engine model: 3048	Engine serial number: HOP081888
Engine year of manufacture: 2016	Date installed: April 2019	
Rating (BHP): 230	Speed (RPM): 1700	Number of cylinders: 64
Fuel type: <input checked="" type="checkbox"/> CARB diesel <input type="checkbox"/> Natural gas <input type="checkbox"/> Propane/LPG <input type="checkbox"/> Gasoline <input type="checkbox"/> Digester gas <input type="checkbox"/> Landfill gas <input type="checkbox"/> Other (specify): Alternative fuel/back-up fuel, if applicable (specify):		
Engine meter: <input checked="" type="checkbox"/> Hour meter <input type="checkbox"/> Dedicated fuel meter <input type="checkbox"/> None		
Cycle type: <input type="checkbox"/> two cycle <input checked="" type="checkbox"/> four cycle		Combustion type: <input checked="" type="checkbox"/> Rich burn <input type="checkbox"/> Lean burn
Check all that apply: <input type="checkbox"/> Naturally aspirated <input type="checkbox"/> Turbocharged <input checked="" type="checkbox"/> Aftercooled <input type="checkbox"/> Intercooled <input type="checkbox"/> Air-to-fuel ratio controller <input type="checkbox"/> Smoke puff limiter <input type="checkbox"/> Electronic control module <input type="checkbox"/> Direct fuel injection <input type="checkbox"/> Pre-combustion chamber <input type="checkbox"/> Piston scavenging <input type="checkbox"/> Other(s) (specify):		
Add-on emission control technology: <input type="checkbox"/> Yes <input type="checkbox"/> No (if applicable, attach manufacturer's specifications and CARB certification or source test results)		
If yes: Manufacturer:	Model:	Serial No.: CARB EOR:
Type: <input type="checkbox"/> SCR <input type="checkbox"/> Non-SCR <input type="checkbox"/> Particulate trap <input type="checkbox"/> EGR <input type="checkbox"/> Oxidation catalyst <input type="checkbox"/> Other (specify):		
Stack data Exhaust stack height from ground: feet Exhaust stack diameter: feet		
Stack is: <input type="checkbox"/> horizontal <input type="checkbox"/> vertical <input type="checkbox"/> weather cap Vent data: Exhaust temp, °F Maximum exhaust rate (ACFM):		

-For District use only-

Application number:	Invoice number:	Permit number:	Company/facility number:
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Page 1 of 2

Section 4: Emissions data

Emission Factor Basis (attach any source specified): <u>Please, see attached document.</u>				
USEPA family name _____		CARB family name _____		
<input type="checkbox"/> Manufacturer	<input type="checkbox"/> Source test	<input type="checkbox"/> MDAQMD default	<input type="checkbox"/> USEPA AP-42	
<input type="checkbox"/> Other (please specify): _____				
Emissions data:				
Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO _x	_____	_____	_____	_____
NMHC	_____	_____	_____	_____
CO	_____	_____	_____	_____
PM ₁₀	_____	_____	_____	_____
SO _x	_____	_____	_____	_____
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.				

Section 5: Powered Item

This ICE is used to power: <input type="checkbox"/> Electrical generator <input checked="" type="checkbox"/> Compressor <input type="checkbox"/> Pump <input type="checkbox"/> Paint spray gun <input type="checkbox"/> Conveyor or drive				
<input type="checkbox"/> Fire pump <input type="checkbox"/> Other (specify): _____				
PERP registration (if applicable): _____				
Manufacturer:	Model:	Serial No.:	Type/size/rating:	

Section 6: Operation information


Fuel Consumption: <u>10.7</u> at max rated load <input checked="" type="checkbox"/> gal/hour <input type="checkbox"/> SCF/hour <input type="checkbox"/> MMbtu/hr	
Typical load: _____	
Facility annual operation by quarters (percent):	Expected operating hours of equipment
<input checked="" type="checkbox"/> Uniform OR _____ % Jan-Mar _____ % Apr-Jun	_____ Hrs/day _____ Days/wk <u>1</u> Wk/yr
_____ % Jul-Sep _____ % Oct-Dec	Total annual hours <u>36</u>

Section 7: Receptor information

Distance (feet) and direction to the property line of closest: <u>18,500 ft</u> residence <u>20,880 ft</u> business <u>28,837 ft</u> school
Name of closest school (K-12): <u>Sycamore Rock Elementary School</u>
If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&S 542301.6)

***Please note:** District staff may contact you for further information. Failure to provide additional information as requested in a timely manner may result in delays in the processing of this permit application.

Section 8: Certification

I hereby certify that all information contained herein is true and correct.			
Carlos Uruchurtu	Plant Manager		<u>4/25/19</u>
Name of responsible official	Official title		
Phone: (760) 952-4864 or (760) 381-7693	Email: <u>carlosgabriel.uruchurtu@cemex.com</u>		

Application submission instructions:

- 1) Submit completed application to Engineering@mdaqmd.ca.gov
- 2) Pay the corresponding application fee of \$288 per permit for new or modified permit (or \$164 for change of owner) via check or credit card.

Payment by check:
Make check payable to Mojave Desert AQMD
Mail the check with a copy of this completed application to:
Mojave Desert AQMD
14306 Park Avenue
Victorville, CA 92392

Payment by credit card:
Pay online at <http://www.mdaqmd.ca.gov>
Click "Pay Fees"
Please note: a surcharge applies for all credit card payments.

- 3) If payment is made online via credit card, please email the receipt to Engineering@mdaqmd.ca.gov
- Should you have any additional questions, please, do not hesitate to contact the permitting division at 760-245-1661, or via email at engineering@mdaqmd.ca.gov



Government Payment Service

GovPayNet

7102 Lakeview Parkway West Drive
Indianapolis, IN 46268

24 Hour Customer Service #: 888-604-7888

Applications Payment Confirmation (Ref #: 25657361)

PLC: Mojave Desert Air Quality Management District **Date:** 04/25/2019 18:36 EDT
8094 14306 Park Avenue
 Victorville, California 92392
For: Applications

TRANSACTION INFORMATION**Contact's Name:** Alejandra Silva**Transaction Reference #:** 25657361**Doing Business As:** Cemex**Transaction Date/Time:** 04/25/2019 18:36 EDT**Company Name:** Cemex**Street Address:** 16888 E St
Victorville, Ca 92394**Telephone #:** (760)381-7638**Site Address:** 25220 Black Mountain Quarry Rd
Apple Valley, Ca 92307**Equipment Description:** Cemex -ice Emergency Pump ~~(Cemex -ice Emergency Pump)~~**BILLING INFORMATION****Name:** Kandyi Martinez**Address:** 16888 E St**City, State Zip:** Victorville, Ca 92394**Phone #:** (760)381-7638**Card #:** xxxx-xxxx-xxxx-3172**PAYMENT INFORMATION****Approval #:** 095375**Payment Amount:** \$288.00**Service Fee:** \$11.25**Total Amount:** \$299.25**The service fee is not refundable.****ATTENTION CARDHOLDER**

If you have questions about the processing of your payment, please call GovPayNet at 888-604-7888.

Thank you for using GovPayNet

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT**BRAD POIRIEZ, EXECUTIVE DIRECTOR**

14306 Park Avenue, Victorville, CA 92392-2310

760.245.1661 • Fax 760.245.2022

Email: engineering@mdaqmd.ca.govwww.MDAQMD.ca.gov • @MDAQMD

General Application Form

Remit **\$288.00** with this document (\$164.00 for change of owner)

PLEASE TYPE OR PRINT

Section 1: Owner information

a. Permit to be issued to (company name): CEMEX Construction Material Pacific, LLC		b. Federal tax ID #: 72-0266503	
c. Mailing/billing address (for above company name) include city, state and zip code: 18985 North "E" Street, Victorville, CA 92384			
d. Facility or business license name (for equipment location): CEMEX Construction Material Pacific, LLC			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): 25225 Black Mountain Quarry Road, Apple Valley, CA 92307		Equip. coordinates (lat/long): 34.62417 -117.50019	
f. Contact name: Alejandro V. Silva	Title: Environmental Manager	Email address: alejandro.v.silva@cemex.com	Phone: (760) 361-7940
General nature of business: Concrete Manufacturing		Company NAICS: 327210	
Type of Organization <input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency <input type="checkbox"/> Federal agency			

Section 2: Nature of application

Application is hereby made for the following equipment: Portable Compressor - John Deere, Name - Comp1	
Application is for what type of permit: <input checked="" type="checkbox"/> New construction <input type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: N/A Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

Section 3: Equipment information

Equipment description (give a brief description of the equipment and/or process): Diesel-Fuel Internal Combustion Engine - Portable Compressor John Deere	
Power Output: 240 HP (185 kW)	
Engine Model/Number: 6058	
Engine Serial Number: TBD	
Manufacturer: John Deere Model: 6058 Serial number: H0P061856	
Add-on air pollution control equipment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Note: most APCE require a separate application)	
If yes: Manufacturer: Model: Serial #: CARB EQ#:	
Type (specify):	
Stack data Exhaust stack height from ground: 50 feet Exhaust stack diameter: 2.0 feet	
Stack is: <input checked="" type="checkbox"/> horizontal <input type="checkbox"/> vertical <input type="checkbox"/> open <input type="checkbox"/> weather cap	
Vent data: Exhaust temp. °F Maximum exhaust rate (CFM):	

-For District use only-

Application number:	Invoice number:	Permit number:	Company/facility number:
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Page 1 of 2

Section 4: Emissions data

Emission Factor Basis (attach any source specified): Please, see attached document.				
<input type="checkbox"/> Manufacturer <input type="checkbox"/> Source test <input type="checkbox"/> MDAQMD default <input type="checkbox"/> USEPA AP-42 <input type="checkbox"/> Other (please specify): _____				
Emissions data:				
Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO _x	_____	_____	_____	_____
NMHC	_____	_____	_____	_____
CO	_____	_____	_____	_____
PM ₁₀	_____	_____	_____	_____
SO _x	_____	_____	_____	_____
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.				

Section 5: Operation information


Fuel Consumption: <u>10.7</u> at max rated load <input checked="" type="checkbox"/> gal/hr <input type="checkbox"/> SCF/hr <input type="checkbox"/> MMBtu/hr	
Typical load: _____	
Facility annual operation by quarters (percent): <input checked="" type="checkbox"/> Uniform OR _____ % Jan-Mar _____ % Apr-Jun _____ % Jul-Sep _____ % Oct-Dec	Expected operating hours of equipment _____ Hrs/day _____ Days/wk ¹ _____ Wk/yr Total annual hours _____

Section 6: Receptor information

Distance (feet) and direction to the property line of closest: <u>18,500 ft</u> residence <u>20,000 ft</u> business <u>29,637 ft</u> school
Name of closest school (K-12) <u>Sycamore Rodas Elementary School</u>
<i>If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&S 542301.6)</i>

***Please note:** District staff may contact you for further information. Failure to provide additional information as requested in a timely manner may result in delays in the processing of this permit application.

Section 7: Certification

I hereby certify that all information contained herein is true and correct.			
Carlos Uruchurtu	Plant Manager		<u>4/25/19</u>
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: (760) 952-4864 or (760) 381-7693	Email: <u>carlosgabriel.uruchurtu@cemex.com</u>		

Application submission instructions:

- 1) Submit completed application to Engineering@mdaqmd.ca.gov
- 2) Pay the corresponding application fee of \$288 per permit for new or modified permit (or \$164 for change of owner) via check or credit card.

Payment by check:

Make check payable to the Mojave Desert AQMD
Mail the check with a copy of this completed application to:

Mojave Desert AQMD
14306 Park Avenue
Victorville, CA 92392

Payment by credit card:

Pay online at <http://www.mdaqmd.ca.gov>
Click "Pay Fees"

Please note: a surcharge applies for all credit card payments.

- 3) If payment is made online via credit card, please email the receipt to Engineering@mdaqmd.ca.gov
- Should you have any additional questions, please, do not hesitate to contact the permitting division at 760-245-1661, or via email at engineering@mdaqmd.ca.gov



Government Payment Service
GovPayNet
7102 Lakeview Parkway West Drive
Indianapolis, IN 46268
24 Hour Customer Service #: 888-604-7888

Applications Payment Confirmation (Ref #: 25679315)

PLC: Mojave Desert Air Quality Management District **Date:** 04/29/2019 14:13 EDT
8094 14306 Park Avenue
Victorville, California 92392
For: Applications

TRANSACTION INFORMATION

Contact's Name: Alejandra Silva
Doing Business As: Cemex
Company Name: Cemex
Street Address: 16888 E St
Victorville, Ca 92394
Telephone #: (760)381-7649
Site Address: 25220 Black Mountain Quarry Rd
Apple Valley, Ca 92307
Equipment Description: Cemex - General App / Compressor 2

Transaction Reference #: 25679315
Transaction Date/Time: 04/29/2019 14:13 EDT

BILLING INFORMATION

Name: KandyL Martinez
Address: 16888 E St
City, State Zip: Victorville, Ca 92394
Phone #: (760)381-7689
Card #: xxxx-xxxx-xxxx-3172

PAYMENT INFORMATION

Approval #: 020433
Payment Amount: \$288.00
Service Fee: \$11.25
Total Amount: \$299.25

The service fee is not refundable.

ATTENTION CARDHOLDER

If you have questions about the processing of your payment, please call GovPayNet at 888-604-7888.

Thank you for using GovPayNet

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT**BRAD POIRIEZ, EXECUTIVE DIRECTOR**

14306 Park Avenue, Victorville, CA 92392-2310

760.245.1661 • Fax 760.245.2022

Email: engineering@mdaqmd.ca.govwww.MDAQMD.ca.gov • @MDAQMD**Application for internal combustion engine (I.C.E.) only**Remit **\$288.00** with this document (\$164.00 for change of owner)

PLEASE TYPE OR PRINT

Section 1: Owner information

a. Permit to be issued to (company name): CEMEX Construction Material Pacific, LLC		b. Federal tax ID #: 72-0296600	
c. Mailing/billing address (for above company name) include city, state and zip code: 16889 North "E" Street, Victorville, CA 92304			
d. Facility or business license name (for equipment location): CEMEX Construction Material Pacific, LLC			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): 35226 Black Mountain Quarry Road, Apple Valley, CA 92307		Equip. coordinates (lat/long): 34.82417 / -117.190619	
f. Contact name: Alejandra V. Silva	Title: Environmental Manager	Email address: alejandra.silva@cemex.com	Phone: (760) 351-7949
General nature of business: Cement Manufacturing		Company NAICS: 307310	
Type of Organization <input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency <input type="checkbox"/> Federal agency			

Section 2: Nature of application

Application is hereby made for the following equipment: Portable Compressor - John Deere, Name-COMP2	
Application is for what type of permit: <input checked="" type="checkbox"/> New construction <input type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: NA Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

Section 3: Equipment information

Engine function: <input checked="" type="checkbox"/> Prime <input type="checkbox"/> Emergency <input type="checkbox"/> Low-use (<80 hr/yr) <input checked="" type="checkbox"/> Portable <input type="checkbox"/> Stand-by (as defined in Rule 301[E](1))		
Engine manufacturer: John Deere	Engine model: 6668	Engine serial number: T80
Engine year of manufacture: 2018	Date installed: April 2019	
Rating (BHP): 356	Speed (RPM): 1780	Number of cylinders: 88
Fuel type: <input checked="" type="checkbox"/> CARB diesel <input type="checkbox"/> Natural gas <input type="checkbox"/> Propane/LPG <input type="checkbox"/> Gasoline <input type="checkbox"/> Digester gas <input type="checkbox"/> Landfill gas <input type="checkbox"/> Other (specify): Alternative fuel/back-up fuel, if applicable (specify):		
Engine meter: <input checked="" type="checkbox"/> Hour meter <input type="checkbox"/> Dedicated fuel meter <input type="checkbox"/> None		
Cycle type: <input type="checkbox"/> two cycle <input checked="" type="checkbox"/> four cycle		Combustion type: <input checked="" type="checkbox"/> Rich burn <input type="checkbox"/> Lean burn
Check all that apply: <input type="checkbox"/> Naturally aspirated <input type="checkbox"/> Turbocharged <input checked="" type="checkbox"/> Aftercooled <input type="checkbox"/> Intercooled <input type="checkbox"/> Air-to-fuel ratio controller <input type="checkbox"/> Smoke puff limiter <input type="checkbox"/> Electronic control module <input type="checkbox"/> Direct fuel injection <input type="checkbox"/> Pre-combustion chamber <input type="checkbox"/> Piston scavenging <input type="checkbox"/> Other(s) (specify):		
Add-on emission control technology: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (if applicable, attach manufacturer's specifications and CARB certification or source test results)		
If yes: Manufacturer:	Model:	Serial No.: CARB EO#:
Type: <input type="checkbox"/> SCR <input type="checkbox"/> Non-SCR <input type="checkbox"/> Particulate trap <input type="checkbox"/> EGR <input type="checkbox"/> Oxidation catalyst <input type="checkbox"/> Other (specify):		
Stack data Exhaust stack height from ground: feet Exhaust stack diameter: feet		
Stack is: <input type="checkbox"/> horizontal <input type="checkbox"/> vertical <input type="checkbox"/> weather cap Vent data: Exhaust temp: °F Maximum exhaust rate (ACFM):		

-For District use only-

Application number:	Invoice number:	Permit number:	Company/facility number:
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Section 4: Emissions data

Emission Factor Basis (attach any source specified): <i>Please, see attached documents.</i>				
USEPA family name		CARB family name		
<input type="checkbox"/> Manufacturer	<input type="checkbox"/> Source test	<input type="checkbox"/> MDAQMD default	<input type="checkbox"/> USEPA AP-42	
<input type="checkbox"/> Other (please specify):				
Emissions data:				
Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO _x				
NMHC				
CO				
PM ₁₀				
SO _x				
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.				

Section 5: Powered Item

This ICE is used to power: <input type="checkbox"/> Electrical generator <input checked="" type="checkbox"/> Compressor <input type="checkbox"/> Pump <input type="checkbox"/> Paint spray gun <input type="checkbox"/> Conveyor or drive				
<input type="checkbox"/> Fire pump <input type="checkbox"/> Other (specify):				
PERP registration (if applicable):				
Manufacturer:	Model:	Serial No.:	Type/size/rating:	

Section 6: Operation information


Fuel Consumption: <u>10.7</u> at max rated load <input checked="" type="checkbox"/> gal/hour <input type="checkbox"/> SCF/hour <input type="checkbox"/> MMbtu/hr	
Typical load:	
Facility annual operation by quarters (percent):	
<input checked="" type="checkbox"/> Uniform OR <u> </u> % Jan-Mar <u> </u> % Apr-Jun	Expected operating hours of equipment
<u> </u> % Jul-Sep <u> </u> % Oct-Dec	<u> </u> Hrs/day <u> </u> Days/wk <u>1</u> Wk/yr
Total annual hours: <u> </u>	

Section 7: Receptor information

Distance (feet) and direction to the property line of closest: <u>18,500 ft</u> residence <u>20,860 ft</u> business <u>29,607 ft</u> school			
Name of closest school (K-12) <u>Sycamore Rocks Elementary School</u>			
If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&S 542301.6)			

***Please note:** District staff may contact you for further information. Failure to provide additional information as requested in a timely manner may result in delays in the processing of this permit application.

Section 8: Certification

I hereby certify that all information contained herein is true and correct.			
Carlos Uruchurtu	Plant Manager		4/25/19
Name of responsible official	Official title		
Phone: (760) 952-4864 or (760) 381-7693	Email: carlosgabriel.uruchurtu@cemex.com	Date signed	

Application submission instructions:

- 1) Submit completed application to Engineering@mdaqmd.ca.gov
- 2) Pay the corresponding application fee of \$288 per permit for new or modified permit (or \$164 for change of owner) via check or credit card.

Payment by check:
Make check payable to **Mojave Desert AQMD**
Mail the check with a copy of this completed application to:
Mojave Desert AQMD
14306 Park Avenue
Victorville, CA 92392

Payment by credit card:
Pay online at <http://www.mdaqmd.ca.gov>
Click "Pay Fees"
Please note: a surcharge applies for all credit card payments.

- 3) If payment is made online via credit card, please email the receipt to Engineering@mdaqmd.ca.gov
- Should you have any additional questions, please, do not hesitate to contact the permitting division at 760-245-1661, or via email at **engineering@mdaqmd.ca.gov**

4/25/2019

Payment Confirmation



Government Payment Service
GovPayNet
7102 Lakeview Parkway West Drive
Indianapolis, IN 46268
24 Hour Customer Service #: 888-604-7888

Applications Payment Confirmation (Ref #: 25657371)

PLC: Mojave Desert Air Quality Management District **Date:** 04/25/2019 18:40 EDT
8094 14306 Park Avenue
Victorville, California 92392
For: Applications

TRANSACTION INFORMATION

Contact's Name: Alejandra Silva

Transaction Reference #: 25657371

Doing Business As: Cemex

Transaction Date/Time: 04/25/2019 18:40 EDT

Company Name: Cemex

Street Address: 16888 E St
Victorville, Ca 92394

Telephone #: (760)381-7638

Site Address: 25220 Black Mountain Quarry Rd
Apple Valley, Ca 92307

Equipment Description: Cemex -ice Compressor 2

BILLING INFORMATION

Name: KandyI Martinez

Address: 16888 E St

City, State Zip: Victorville, Ca 92394

Phone #: (760)381-7638

Card #: xxxx-xxxx-xxxx-3172

PAYMENT INFORMATION

Approval #: 001323

Payment Amount: \$288.00

Service Fee: \$11.25

Total Amount: \$299.25

The service fee is not refundable.

ATTENTION CARDHOLDER

If you have questions about the processing of your payment, please call GovPayNet at 888-604-7888.

Thank you for using GovPayNet

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Form #: EUR

1/1

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT**BRAD POIRIEZ, EXECUTIVE DIRECTOR**

14306 Park Avenue, Victorville, CA 92392-2310

760.245.1661 • Fax 760.245.2022

Email: engineering@mdaqmd.ca.govwww.MDAQMD.ca.gov • @MDAQMD

General Application Form

Remit **\$288.00** with this document (\$164.00 for change of owner)

PLEASE TYPE OR PRINT

Section 1: Owner information

a. Permit to be issued to (company name): CEMEX Construction Material Pacific, LLC		b. Federal tax ID #: 72-0256503	
c. Mailing/billing address (for above company name) include city, state and zip code: 18885 North "E" Street, Victorville, CA 92384			
d. Facility or business license name (for equipment location): CEMEX Construction Material Pacific, LLC			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): 25225 Black Mountain Quarry Road, Apple Valley, CA 92307		Equip. coordinates (lat/long): 34.02417 / -117.300619	
f. Contact name: Alejandra Y. Silva	Title: Environmental Manager	Email address: ajlsilva@cemex.com	Phone: (760) 361-7849
General nature of business: Concrete Manufacturing			Company NAICS: 327310
Type of Organization <input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency <input type="checkbox"/> Federal agency			

Section 2: Nature of application

Application is hereby made for the following equipment: Portable Compressor - John Deere, Name - Comp2	
Application is for what type of permit: <input checked="" type="checkbox"/> New construction <input type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: NW _____ Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

Section 3: Equipment information

Equipment description (give a brief description of the equipment and/or process): Diesel-Driven Internal Combustion Engine - Portable Compressors John Deere			
Power Output: 200 HP (149 kW)			
Engine Model Number: E100			
Engine Serial Number: TBD			
Manufacturer: John Deere Model: 6300 Serial number: HOP061679			
Add-on air pollution control equipment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Note: most APCE require a separate application)			
If yes: Manufacturer: _____ Model: _____ Serial #: _____ CARB EO#: _____			
Type (specify): _____			
Stack data Exhaust stack height from ground: 10 feet Exhaust stack diameter: 0.5 feet			
Stack is: <input checked="" type="checkbox"/> horizontal <input type="checkbox"/> vertical <input type="checkbox"/> open <input type="checkbox"/> weather cap			
Vent data: Exhaust temp: _____ °F Maximum exhaust rate (CFM): _____			

-For District use only-

Application number:	Invoice number:	Permit number:	Company/facility number:
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Page 1 of 2

Section 4: Emissions data

Emission Factor Basis (attach any source specified): <small>Please, see attached document.</small>				
<input type="checkbox"/> Manufacturer <input type="checkbox"/> Source test <input type="checkbox"/> MDAQMD default <input type="checkbox"/> USEPA AP-42				
<input type="checkbox"/> Other (please specify): _____				
Emissions data:				
Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO _x	_____	_____	_____	_____
NMHC	_____	_____	_____	_____
CO	_____	_____	_____	_____
PM ₁₀	_____	_____	_____	_____
SO _x	_____	_____	_____	_____
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.				

Section 5: Operation information

Fuel Consumption: <u>10.7</u> at max rated load <input checked="" type="checkbox"/> gal/hour <input type="checkbox"/> SCF/hour <input type="checkbox"/> MMBtu/hr	
Typical load: _____	
Facility annual operation by quarters (percent): <input checked="" type="checkbox"/> Uniform OR _____ % Jan-Mar _____ % Apr-Jun _____ % Jul-Sep _____ % Oct-Dec	Expected operating hours of equipment _____ Hrs/day _____ Days/wk <u>1</u> Wk/yr Total annual hours <u>36</u>

Section 6: Receptor information

Distance (feet) and direction to the property line of closest: <u>18,500 ft</u> residence <u>20,880 ft</u> business <u>29,637 ft</u> school
Name of closest school (K-12) <u>Sycamore Rocks Elementary School</u>
<i>If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&S §42301.6)</i>

***Please note:** District staff may contact you for further information. Failure to provide additional information as requested in a timely manner may result in delays in the processing of this permit application.

Section 7: Certification

I hereby certify that all information contained herein is true and correct.			
Carlos Uruchurtu	Plant Manager		<u>4/25/19</u>
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: (760) 952-4864 or (760) 381-7693		Email: <u>carlosgabriel.uruchurtu@cemex.com</u>	

Application submission instructions:

- 1) Submit completed application to Engineering@mdaqmd.ca.gov
- 2) Pay the corresponding application fee of \$288 per permit for new or modified permit (or \$164 for change of owner) via check or credit card.

Payment by check:

Make check payable to the Mojave Desert AQMD
Mail the check with a copy of this completed application to:

Mojave Desert AQMD

14306 Park Avenue
Victorville, CA 92392

Payment by credit card:

Pay online at <http://www.mdaqmd.ca.gov>

Click "Pay Fees"

Please note: a surcharge applies for all credit card payments.

- 3) If payment is made online via credit card, please email the receipt to Engineering@mdaqmd.ca.gov
Should you have any additional questions, please, do not hesitate to contact the permitting division at 760-245-1661, or via email at engineering@mdaqmd.ca.gov

Page 2 of 2



Government Payment Service

GovPayNet

7102 Lakeview Parkway West Drive

Indianapolis, IN 46268

24 Hour Customer Service #: 888-604-7888

Applications Payment Confirmation (Ref #: 25679263)

PLC: Mojave Desert Air Quality Management District **Date:** 04/29/2019 14:10 EDT
8094 14306 Park Avenue
 Victorville, California 92392
 For: Applications

TRANSACTION INFORMATION**Contact's Name:** Alejandra Silva**Transaction Reference #:** 25679263**Doing Business As:** Cemex**Transaction Date/Time:** 04/29/2019 14:10 EDT**Company Name:** Cemex**Street Address:** 16888 E St
Victorville, Ca 92394**Telephone #:** (760)381-7649**Site Address:** 25220 Black Mountain Quarry Rd
Apple Valley, Ca 92307**Equipment Description:** Cemex - General App / Compressor 1**BILLING INFORMATION****Name:** KandyI Martinez**Address:** 16888 E St**City, State Zip:** Victorville, Ca 92394**Phone #:** (760)381-7689**Card #:** xxxx-xxxx-xxxx-3172**PAYMENT INFORMATION****Approval #:** 011892**Payment Amount:** \$288.00**Service Fee:** \$11.25**Total Amount:** \$299.25**The service fee is not refundable.****ATTENTION CARDHOLDER**

If you have questions about the processing of your payment, please call GovPayNet at 888-604-7888.

Thank you for using GovPayNet



APR 16 2019

CERTIFIED MAIL

Alejandra Silva
Cemex, Inc.
16888 N. "E" Street
Victorville, CA 92394

Re: Issuance of Emission Reduction Credit Certificates:
S-5064-2, S-5066-4, and S-5068-5
Project: S-1191147, 1191148, 1191149

Dear Ms. Silva:

The Air Pollution Control Officer (APCO) has approved the inter-district transfer of the emission reduction credit (ERC) certificates S-5064-2, S-5066-4, and S-5068-5 to Cemex, Inc. located in the Mojave Desert Air Quality Management District. The District Governing Board granted authority to the APCO to approve inter-district transfer of ERCs pursuant to Resolution #99-02-04, approved on February 18, 1999.

Enclosed are Emission Reduction Credit (ERC) certificates S-5064-2 (NOx), S-5066-4 (PM10), and S-5068-5 (SOx) issued to Cemex, Inc. in the quarterly amounts requested. The enclosed certificate reflects the partial transfer of ownership of ERCs from Sierra Power Corporation in Terra Bella, CA.

Thank you for your cooperation in this matter. Should you have any questions, please telephone Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Sincerely,


Arnaud Marjollet
Director of Permit Services

AM:spl
Enclosures: ERC certificates S-5064-2, S-5066-4, and S-5068-5

Samir Sheikh
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-8400 FAX: (209) 557-8475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (558) 230-6000 FAX: (558) 230-6061
www.valleyair.org www.healthyliving.com

Southern Region
34948 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

Printed on recycled paper



San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT


HEALTHY AIR LIVING™

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308

Emission Reduction Credit Certificate S-5064-2

ISSUED TO: **CEMEX, INC.**
ISSUED DATE: **April 16, 2019**
LOCATION OF REDUCTION: **9000 ROAD 234
TERRA BELLA, CA**

For NOx Reductions In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
220 lbs	220 lbs	219 lbs	219 lbs

Method Of Reduction

- ☐ Shutdown of Entire Stationary Source
☒ Shutdown of Emissions Units
☐ Other

Shutdown of cogeneration with biomass-fired boiler (S-834-3) and associated fuel handling and solid handling equipment (S-834-1, -6, and -10)

Use of these credits outside the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) is not allowed without express written authorization by the SJVUAPCD.

Samir Sheikh, Executive Director / APCO


Arnaud Marjollet, Director of Permit Services



Apr 17 2019 5:21 AM - 5/10/2019



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Emission Reduction Credit Certificate S-5066-4

ISSUED TO: CEMEX, INC.
ISSUED DATE: April 16, 2019
LOCATION OF REDUCTION: 9000 ROAD 234
TERRA BELLA, CA

For PM10 Reductions In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
6 lbs	6 lbs	6 lbs	5 lbs

Portion of above PM10 Reductions that is PM2.5:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
100.0%	100.0%	100.0%	100.0%
6 lbs	6 lbs	6 lbs	5 lbs

Method Of Reduction

- ☐ Shutdown of Entire Stationary Source
☒ Shutdown of Emissions Units
☐ Other

Shutdown of cogeneration with biomass-fired boiler (S-834-3) and associated fuel handling and solid handling equipment (S-834-1, -6, and -10)

Use of these credits outside the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) is not allowed without express written authorization by the SJVUAPCD.

Samir Sheikh, Executive Director / APCO


Arnaud Marjollet, Director of Permit Services



Apr 17 2019 8:21AM - G0022024



San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT


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Emission Reduction Credit Certificate S-5068-5

ISSUED TO: CEMEX, INC.
ISSUED DATE: April 16, 2019
LOCATION OF REDUCTION: 9000 ROAD 234
TERRA BELLA, CA

For SO_x Reductions In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
1 lbs	1 lbs	1 lbs	1 lbs

Method Of Reduction

- ☐ Shutdown of Entire Stationary Source
☒ Shutdown of Emissions Units
☐ Other

Shutdown of cogeneration with biomass-fired boiler (S-834-3) and associated fuel handling and solid handling equipment (S-834-1, -6, and -10)

Use of these credits outside the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) is not allowed without express written authorization by the SJVUAPCD.

Samir Sheikh, Executive Director / APCO


Arnaud Marjollet, Director of Permit Services



APC 17 2019 0214M - 080200CA

End of Application

Appendix B:

Public Notice

Noticing Methods include the following, per District Rule 1302(D)(2) and (3):

- Published in newspapers of general circulation - *Riverside Press Enterprise* (Riverside County) and the *Daily Press* (San Bernardino County) on or before 07-22-19.
- Mailed and/or emailed to MDAQMD contact list of persons requesting notice of actions (see the contact list following the Public Notice in this Appendix).
- Posted on the MDAQMD Website at the following link, and as shown below:
<http://www.mdaqmd.ca.gov/permitting/public-notices-advisories/public-notices-permitting-regulated-industry>

NOTICE OF PRELIMINARY DETERMINATION

NOTICE IS HEREBY GIVEN THAT CEMEX Construction Materials Pacific LLC, operating as CEMEX - Black Mountain Quarry Plant, located at 25220 Black Mountain Quarry Road Apple Valley, CA 92307 and as CEMEX - River Plant, located at 16888 North E Street Victorville, CA 92392, both located in San Bernardino County, California, has submitted an application, to operate two new diesel-fired portable compressor engines and an emergency fire pump. The two towable diesel-fired portable compressors will be moved among each facility depending on the need at either location; the emergency diesel firewater pump will be permanently located at the CEMEX Quarry Plant. The proposed DIESEL IC ENGINE, EMERGENCY FIREWATER PUMP consisting of: Year of Manufacture is 2013. Engine is a certified Tier III 4-Stroke Rich Burn (4SRB) diesel engine, EPA Family DJDXL09.0114; EPA Certificate Number DJDXL09.0114-005; Engine Model Year 2013, that meets USA EPA (NSPS) Tier 3 Emissions Certified Off-Road (40 CFR Part 89) and NSPS Stationary (40 CFR Part 60 Subpart IIII). The proposed two new DIESEL IC ENGINE, PORTABLE AIR COMPRESSOR's are each described as John Deere, Diesel fired internal combustion engine Model No. 6090HFC47A and Serial No. TBD, After Cooled, Diesel Oxidation Catalyst, Diesel Particulate Filter, Selective Catalytic Reduction, producing 250 bhp with 6 cylinders at 2100 rpm while consuming a maximum of 10.1 gal/hr, and powers an Air-Compressor.

Additionally, the applicant has proposed that the Emergency Firewater pump engine to be permitted for 50 hours for testing and maintenance purposes, and each of the two Portable Air Compressors to be operated no more than 480 hours each in any consecutive 12-month period.

Since the engines are to be located at an existing Major Source, the applicant has proposed that the new emissions be offset through the use of Emission Reduction Credits (ERCs) that are wholly owned by CEMEX Construction Materials Pacific LLC. These Emission reduction credits (ERCs) were purchased from Sierra Power Corporation and transferred to CEMEX to offset the applicable annual pollutant emissions produced by the additional engines. The ERCs were transferred from San Joaquin Valley Air Pollution Control District (SJVAPCD) to MDAQMD, in the following quantities: 23 pounds of PM10, 878 pounds of NOx, and 4 pounds of SOx. Since the offsets originate from an upwind District, the ERCs will be applied at an offset

ratio of 1.3 to 1.0 for project annual emissions as required by Rule 1305(C). These emission credits will be used to offset ALL emissions types for which the facility is a Major Source of, namely NO_x, VOCs, and PM₁₀. NO_x will be used to offset VOC's at an additional interpollutant offset ratio of 2:1. CO will not be offset as the District is in attainment for this Air Pollutant. Additionally, and since the facility is an existing Major Source for NO_x, CO, VOCs, and PM₁₀, all these engines will be equipped with Best Available Control Technology (BACT), and Best Available Control Technology for Toxics (T-BACT) for the Portable Air Compressors. The Emergency Firewater Pump is Not Required to be equipped with T-BACT due to its location and the Health Effects from the CEMEX Quarry Plant. As such, the portable air compressors engines shall be equipped with an After Cooler, Diesel Oxidation Catalyst, Diesel Particulate filter, and Selective Catalytic Reduction system in order to achieve a Tier IV Final designation, the maximum emission reductions for this class and category of device. The Emergency Diesel-powered Firewater Pump engine is a certified Tier III engine considered BACT for this class and category.

Concurrently, the applicant has submitted a Title V Permit modification application for their Federal Operating Permit (100005) pursuant to the provisions of the Mojave Desert Air Quality Management District (MDAQMD) Regulation XII. The proposed facility changes require the MDAQMD to perform a thorough New Source Review (NSR), pursuant to District regulation XIII.

The MDAQMD has reviewed the proposal, analyzed the emissions and control equipment associated with the new equipment and determined that the modified facility will continue to operate in compliance with all District, State, and Federal requirements once the modification is complete.

Since the engines are a source of Toxic Air Contaminants, a Health Risk Analysis was conducted, and it has been concluded that the Health Risks associated with the modified facility operations will be acceptable per the 2016 OEHHA Guidelines.

REQUEST FOR COMMENTS: Interested persons are invited to submit written comments and/or other documents regarding the terms and conditions of the proposed NSR modification, and the associated Federal Operating Permit. If you submit written comments, you may also request a public hearing on the NSR action and proposed modification to the Federal Operating Permit. To be considered, comments, documents, and requests for public hearing must be submitted no later than 4:00 P.M. on August 21, 2019, to the MDAQMD, at the address listed below.

PETITION FOR REVIEW: The NSR action and Draft Federal Operating Permit are subject to review and approval by USEPA and the CARB. If the USEPA and CARB do not object to the proposed permit and Statement of Legal and Factual Basis, and the MDAQMD has not addressed a public comment in a satisfactory manner, the public may petition USEPA, Region IX, Operation Permits Section at 75 Hawthorne Street, San Francisco, CA 94105 within 60 days after the end of the USEPA review period for USEPA to reconsider its decision not to object to the permit.

AVAILABILITY OF DOCUMENTS: The proposed Federal Operating Permit, as well as the application and other supporting documentation are available for review at the MDAQMD offices, 14306 Park Avenue, Victorville, CA 92392. In addition, these documents are available on the MDAQMD website and can be viewed at following link: <http://www.mdaqmd.ca.gov/permitting/public-notices-advisories/public-notices-permitting-regulatedindustry>. Please contact Samuel J Oktay, PE, Air Quality Engineer II, at the address above, or (760) 245-1661, extension 1610, or at soktay@mdaqmd.ca.gov with additional questions pertaining to this action and/or corresponding documents. *Traducción en español esta disponible por solicitud. Por favor llame: (760) 245-1661 x1610*

Mr. Larry Trowsdale mchsi 951 E Skylark Ave Ridgecrest, CA 93555	Ms. Janet Laurain Adams Broadwell Joseph & Cardozo 601 Gateway Blvd., St. 1000 South San Francisco, CA 94080-7037	Mr. Ramon Campos Environmental Compliance Manager, Blythe P.O. Box 1210 Blythe, CA 92226
Chief, Planning Division California Air Resources Board P.O. Box 2815 Sacramento, CA 95812	Ms. Desirea Haggard Environmental Manager, CalPortland-Oro 2025 E Financial Way Glendale, CA 91741	City Manager City of Barstow 220 East Mountain View, Suite A Barstow, CA 92311
Mr. Mike Sword Planning Div Mgr, Clark Co Dept of Air Q and 4701 Russell Road, Suite 200 Las Vegas, NV 89118	Ms. Brenda Abernathy Air Program Manager, N45NCW, Naval Air 429 E Bowen Rd, Stop 4014 China Lake, CA 93555-6108	Mr. Kent T. Christensen HS&E Manager, Ducommun Aerostructures 4001 El Mirage Road Adelanto, CA 92301
Environmental Manager Duffield Marine, Inc. 17260 Muskrat Avenue Adelanto, CA 92301	Mr. Randy Lack Chief Marketing Officer, Element Markets, 3555 Timmons Lane, Suite 900 Houston, TX 77027	Ms. Christine Grandstaff Evolution Markets 27801 Golden Ridge Lane San Juan Capistrano, CA 92675
Mr. Jon Boyer High Desert Power Project LLC 19000 Perimeter Rd Victorville, CA 92394	Mr. Glen King Environmental Manager, Luz Solar Partners 43880 Harper Lake Road Harper Lake, CA 92347	Mr. Mike Plessie HQB N B CO, NREA MCAGCC Box 78110 Twentynine Palms, CA 92278-8110
Ms. Carol Kaufman Metropolitan Water District 700 N Alameda Street, 8th Floor, Rm 106 Los Angeles, CA 90012	Mr. David Rib Environmental Manager, Mitsubishi Cement 5808 State Highway 18 Lucerne Valley, CA 92356-9691	Environmental Manager Mobile Pipe Lining & Coating, Inc 12766 Violet Road Adelanto, CA 92301
Mr. John F. Espinoza HES Manager, Molycorp Minerals, LLC HC-1 Box 224 Mountain Pass, CA 92366	Mr. Mark Solheid Senior EHS Analyst, NASA/Goldstone DSCC 93 Goldstone Road Fort Irwin, CA 92310	Mr. Don Shepherd National Park Service, Air Resources Div 12795 W Alameda Pkwy Lakewood, CO 80228
Chief, Bureau of Air Quality NDCNR, Env Prot Div (Air) 901 South Stewart St, Suite 4001 Carson City, NV 89701-5249	Mr. Mike Peay EH&S Manager, Northwest Pipe Co. 12351 Rancho Road Adelanto, CA 92301	Ms. Diana Furman Senior Gas Engineer, PG&E (Attn: Air) P.O. Box 7640 San Francisco, CA 94120
Mr. Steve Smith SB County Transportation Authority 1170 W. Third Street, Second Floor San Bernardino, CA 92410	Mr. Anoop Sukumaran Environmental Engineer, Searles Valley P.O. Box 367 Trona, CA 93592-0367	Ms. Karin Fickerson Air Quality Team Lead, SoCalGas 1650 Mountain View Avenue Oxnard, CA 93030
Mr. Michael Eichenlaub Specialty Minerals Inc. P.O. Box 558 Lucerne Valley, CA 92356-0558	Director, Air Division (Attn: AIR-3) United States EPA, Region IX 75 Hawthorne Street San Francisco, CA 94105	Ms. Anne McQueen Senior Engineer, Yorke Engineering, LLC 31726 Rancho Viejo Road, Suite 218 San Juan Capistrano, CA 92675

Air Program Manager
Environmental Division, USMC MCLB
Box 110170 Bldg 196
Barstow, CA 92311

Mr. Anthony Fang
Metropolitan Water District
700 N Alameda Street, 8th Floor Rm 106
Los Angeles, CA 90012

Ms. Lisa Beckham
United States EPA, Region IX
75 Hawthorne Street
San Francisco, CA 94105

Bureau of Indian Affairs
1451 Research Park Drive, Suite 100
Riverside, CA 92507

Andrew Salas
Chairman, Gabriel Band of Mission Indians -
PO Box 393
Covina, CA 91723

Chief, San Gabriel Band of Mission Indians
PO Box 693
San Gabriel, CA 91778

Ms. Sheri Haggard
Supervising Permit Engineer, MDAQMD
14306 Park Ave
Victorville, CA 92392

Mr. Steve Cummings
Senior Air Quality Tech Specialist, Southern
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Rosemead, CA 91770

Ms. Angela Harrell
Elementis Specialties
31763 Mountain View Road
Newberry Springs, CA 92365

Ms. Jenna Latt
CARB/Office of Ombudsman
9480 Telstar Avenue, Annex 1
El Monte, CA 91731

Mr. Luis Pacheco
EH&S Manager, OMYA (California), Inc.
7225 Crystal Creek Rd
Lucerne Valley, CA 92356

Mr. Joseph Hower
Principal, Air Sciences, Ramboll Environ
350 S Grand Ave, Ste 2800
Los Angeles, CA 90017

Mr. Guy Smith
Permit Engineer, Mojave Desert AQMD
14306 Park Ave
Victorville, CA 92392

Mr. Josh Dugas
Division Chief, San Bernardino County EHS
385 N Arrowhead Ave, Second Floor
San Bernardino, CA 92415-0160

Mr. Juziel Picado
Specialist - Permitting, Kinder-Morgan
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Orange, CA 92868

Mr. John Vidic
Air Program Manager, USAF 412
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Edwards AFB, CA 93524

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Environmental Contact, Metropolitan Water
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Los Angeles, CA 90054

Ms. Jessica Gammett
Environmental Manager, CalPortland
19409 National Trails Hwy
Oro Grande, CA 92368